MARCH 1955 1s. 6d.

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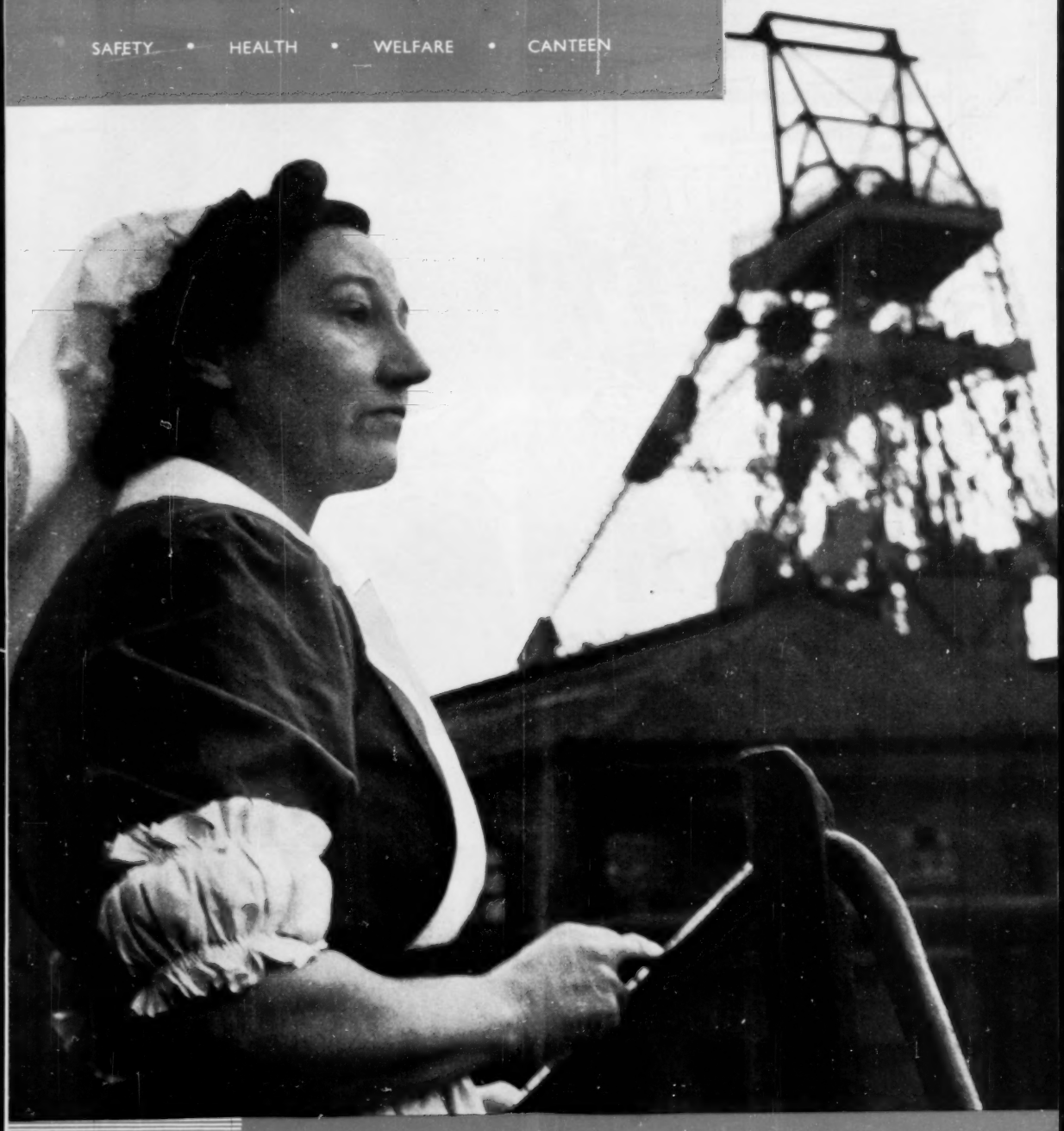
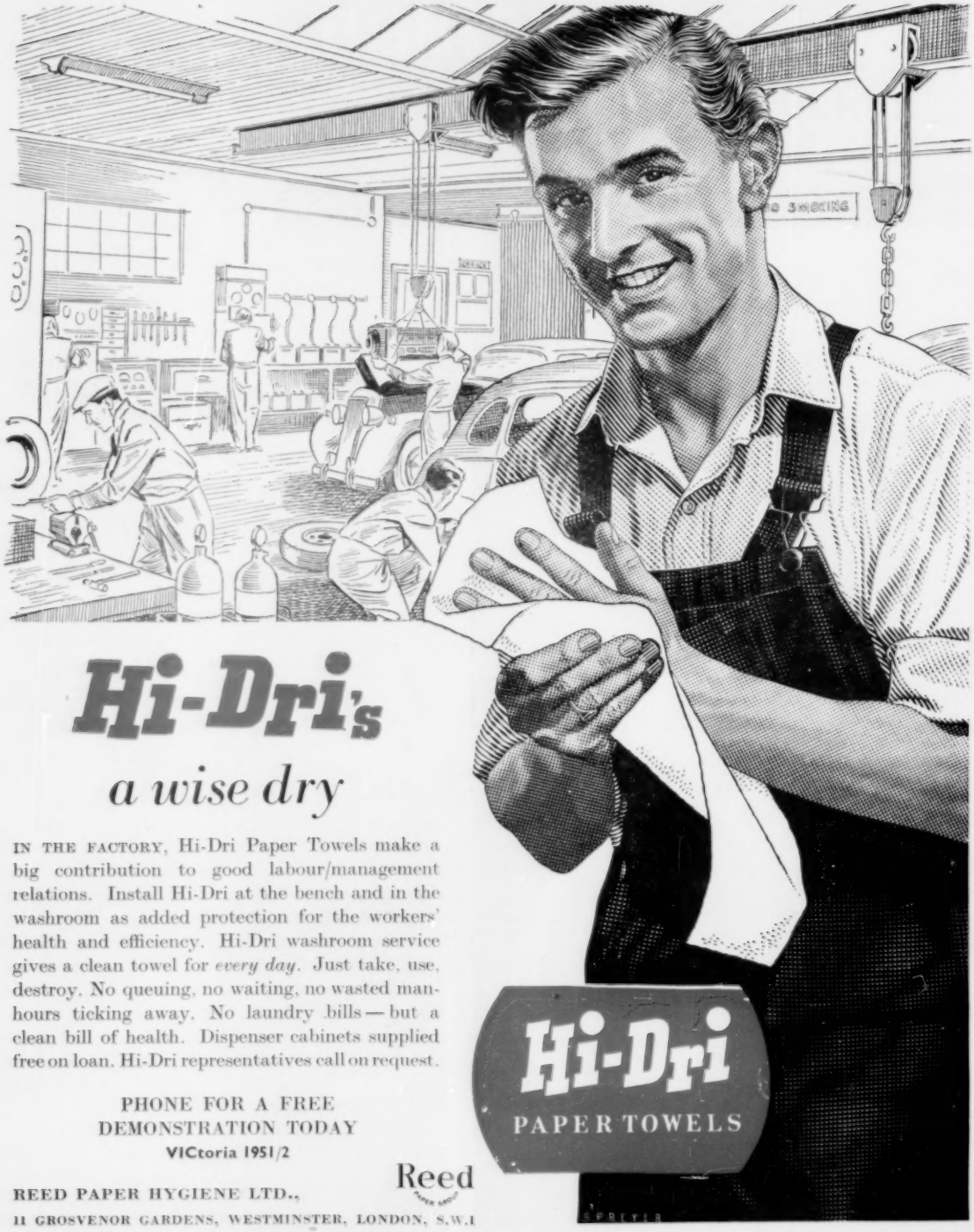


New Trends in Industrial Welfare (See Page 453)



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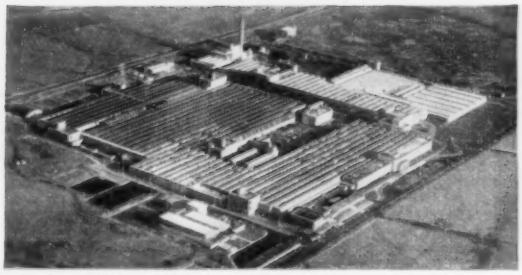
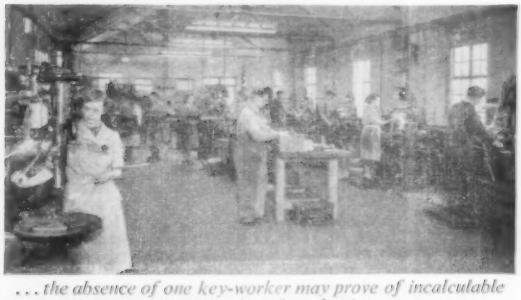


In large industrial plants, idle machines due to sickness-absence can cause bottlenecks affecting many departments...



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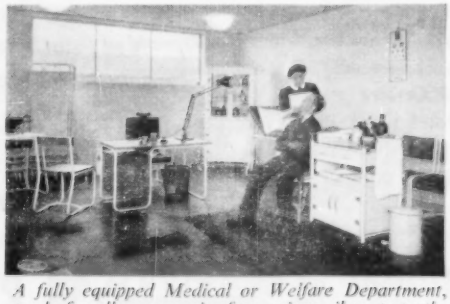

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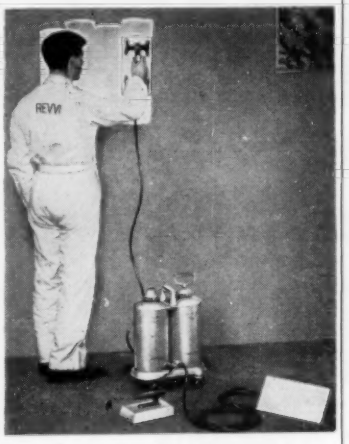

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MARCH 1955

PERSONNEL MANAGEMENT & INDUSTRIAL EQUIPMENT
SAFETY • HEALTH • WELFARE • CANTEEN

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How We Made Our Sick Fund Really Work — *R. B. Boynton* — 465
A personnel manager tells how his firm organised fair shares in benevolence

Management Through The Supervisor's Eyes — *Discussion Leader* — 466
Three Ways of Solving Shop Floor Differences

INDUSTRIAL EQUIPMENT AND MANAGEMENT

Equipment That Raises Output — 475
LIGHTING ★ PACKAGING ★ EFFICIENCY AIDS
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WELFARE, TRAINING AND HEALTH

Making Welfare's New Look Worth The Cost — *Robert Douglas* — 453
Deals with the modern approach to industrial welfare and the pre-conditions of its success

How To Train Young Executives On The Job — *Robert McKinnon* — 456
An account of a new Tube Investments *training course suitable for the medium-sized firm also*

This Firm Runs Its Own Welfare State — *George Williamson* — 458
The story of the welfare services provided by a Swedish firm. These extend into the workers' social life

A New Policy For Industrial Sports Clubs — *G. A. McPartlin* — 463
Outlines how management can best use the sports club to promote good industrial relations

An Industry Helps The Young Artist — *Paul Nugat* — 462
Describes an art exhibition recently staged by the Shell Petroleum Company

SAFETY • ACCIDENT PREVENTION • CIVIL DEFENCE

How To Reduce Explosion Risks — *Henry Allen* — 468

CANTEENS AND CATERING

How To Cut Canteen Tea Costs — *A. H. Chambers* — 471

NEWS AND READERS' SERVICE

Management At Work .. 460
People At Work 469
Canteen Advice Bureau .. 472
Management Bookshelf .. 478
Official Publications .. 480
March Management Diary .. 482

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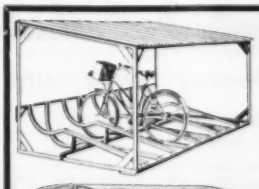

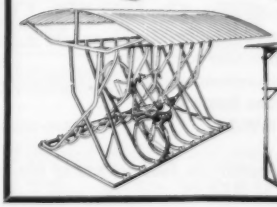

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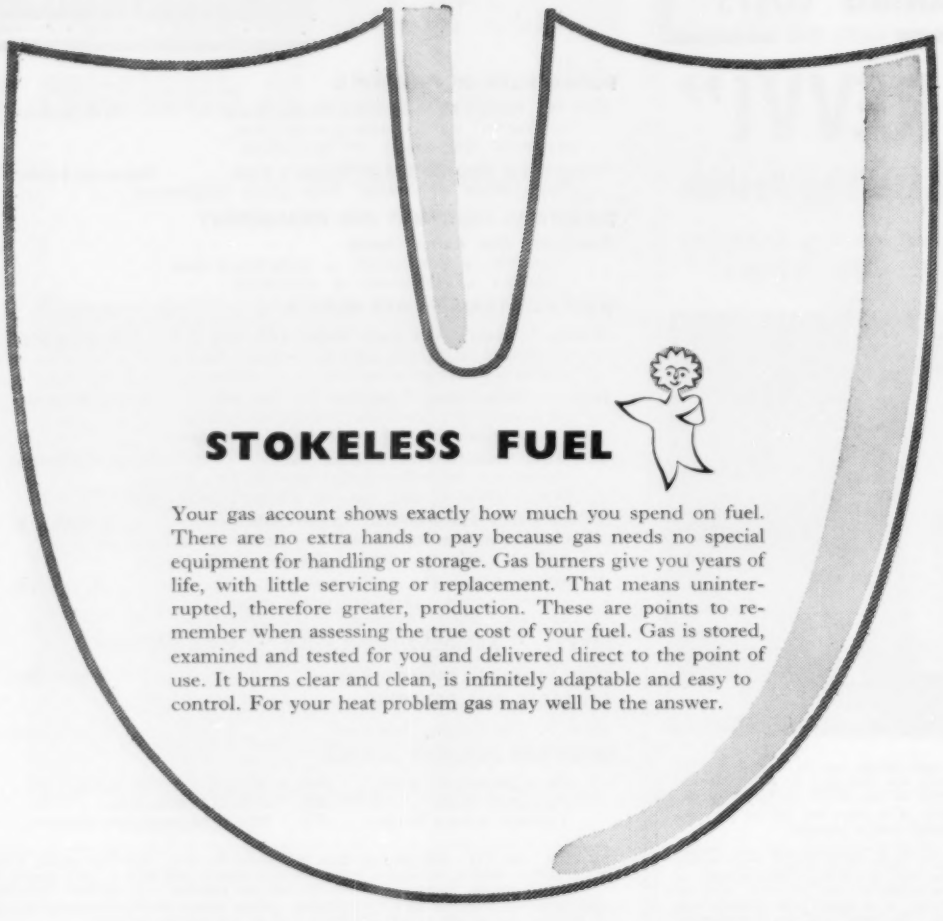

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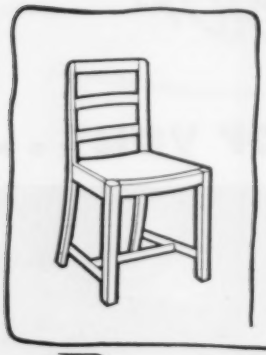

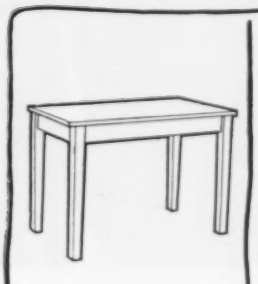

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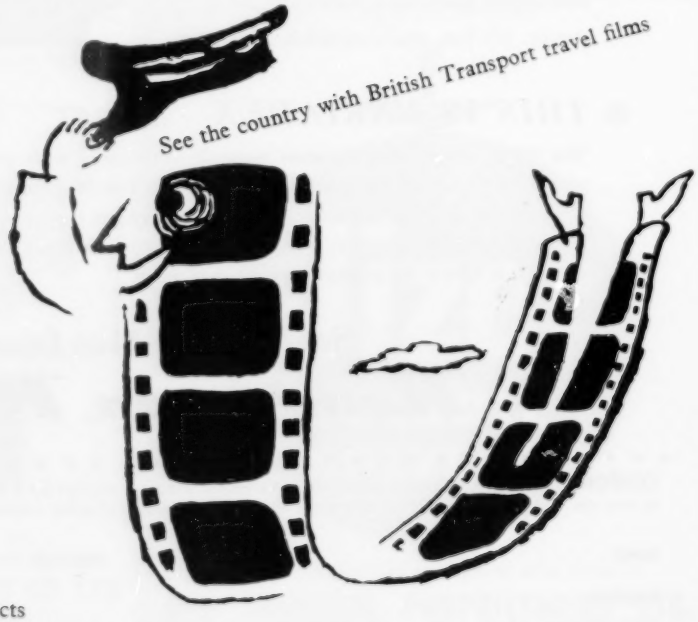

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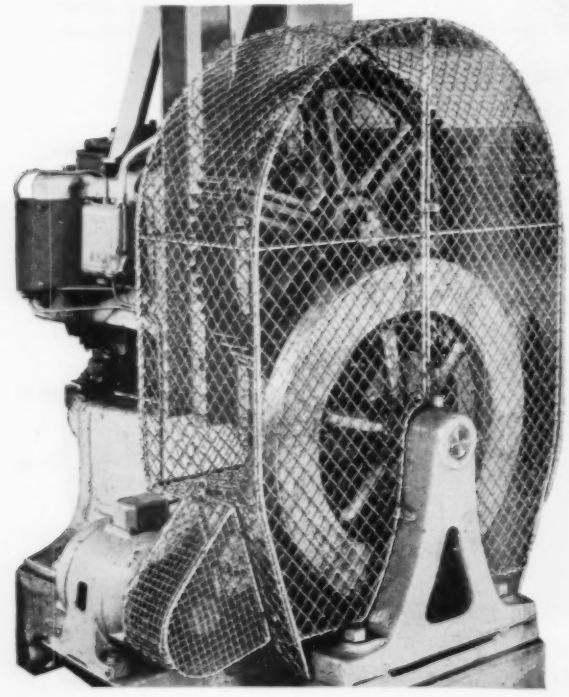

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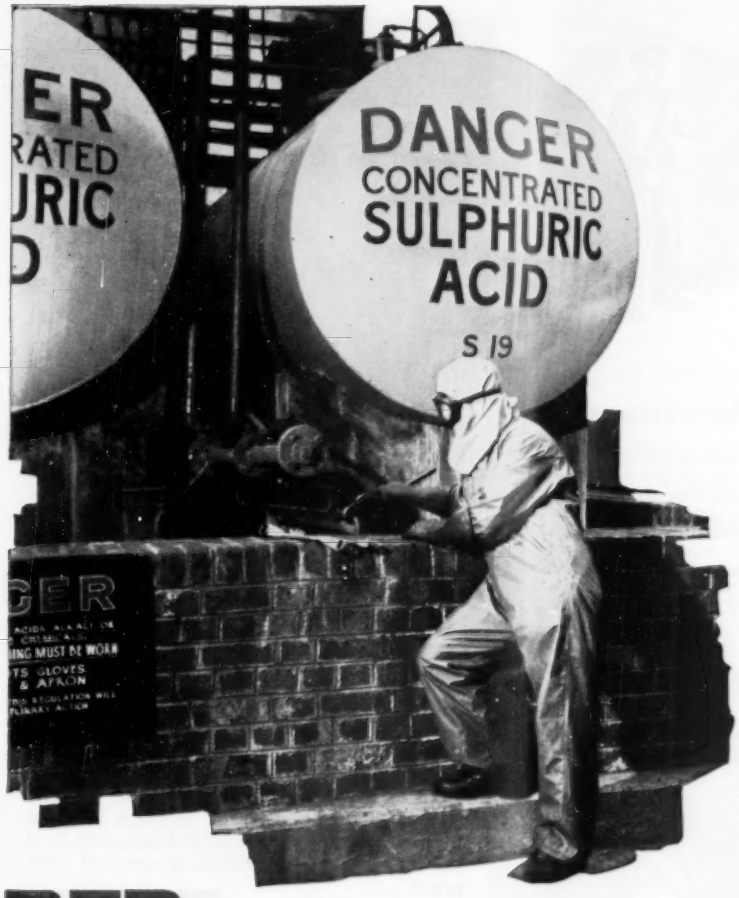

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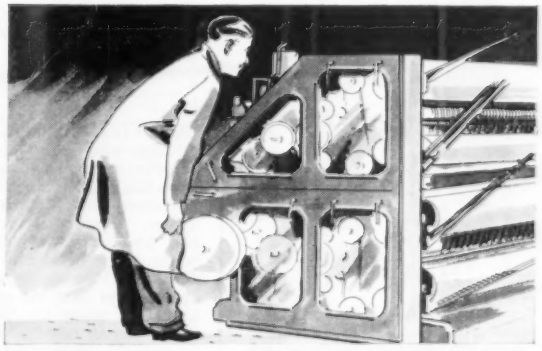

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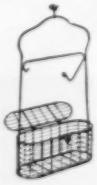

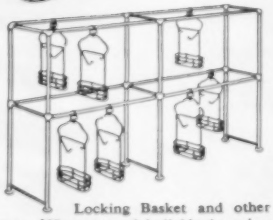

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Wrap-over	13/9	14/11	15/11	18/6
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Bust	33	36	40	44	48	52
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Length	43	44	45	46	47	47

May we send a sample for you to see and test.

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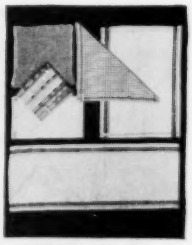

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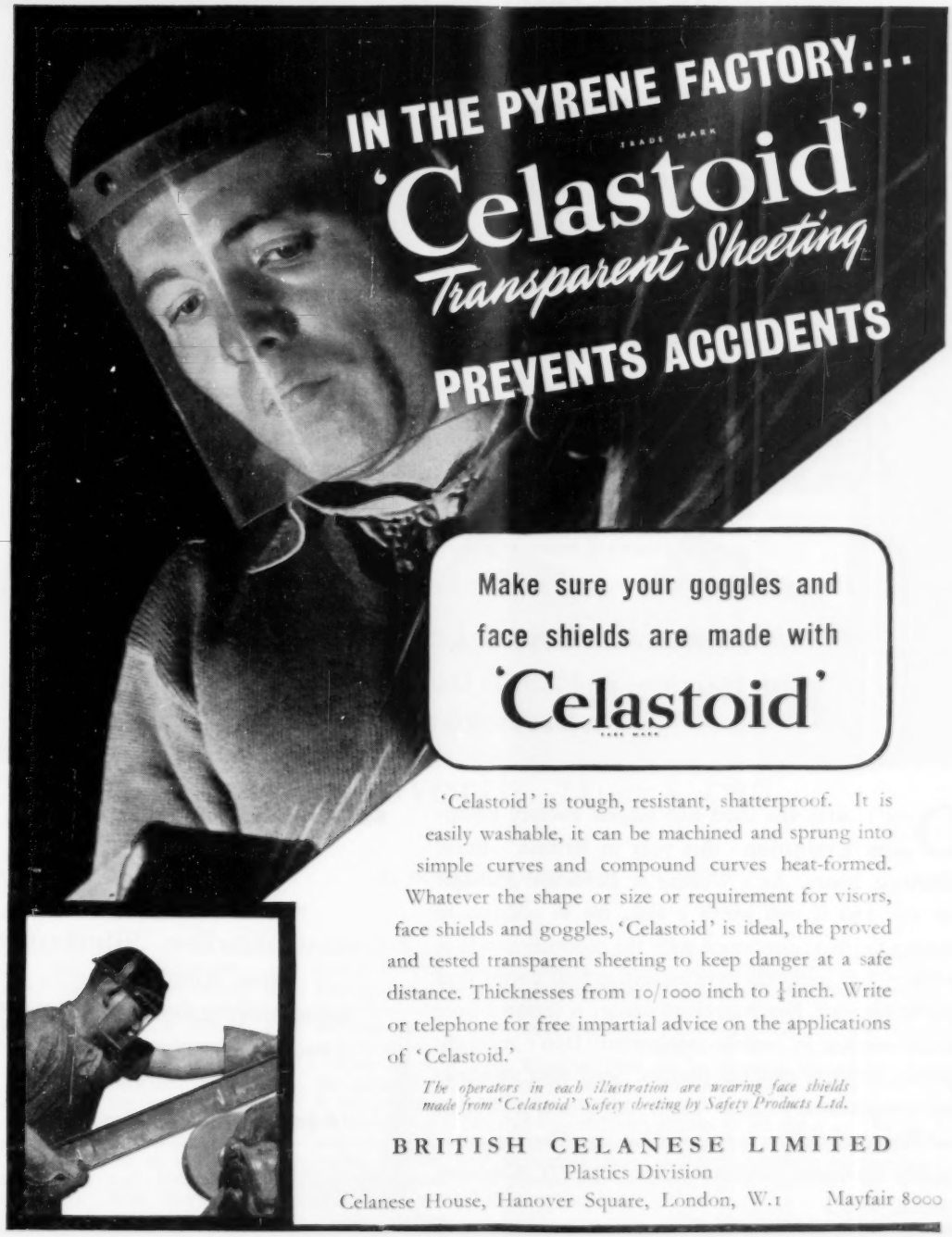

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FACTORY EQUIPMENT EXHIBITION

EARLS COURT · LONDON · SW5

28th March to 2nd April · Daily 10-7 (Saturday 10-5)

ADMISSION 2/6

DON'T MISS the third and biggest Factory Equipment Exhibition—this year at Britain's finest exhibition centre. As a Welfare or Personnel Manager you will find it well worth a visit, for in addition to catering for those concerned with the production side of industry, this comprehensive exhibition fully covers your specific interests. Every aspect of welfare is featured from factory seating to canteen equipment. Don't miss the special protective clothing parades. Send your assistants too! *Complimentary Season Ticket will be sent to Welfare and Personnel Officers on application to: The Organiser, Factory Equipment Exhibition (Dept. E3), 117, Kingsway, London, W.C.2*

see the latest equipment demonstrated

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FACTORY CONSTRUCTION · MAINTENANCE

FUEL ECONOMY

MECHANICAL HANDLING · STORAGE

PACKING · WORKS OFFICE

'A better way of doing things'

The exhibition is sponsored by 'The Factory Manager' and 'Factory Equipment News'

PERSONNEL MANAGEMENT
& INDUSTRIAL EQUIPMENT
SAFETY • HEALTH • WELFARE • CANTEEN

COVER PICTURE STORY

Welfare in industry must be founded on good working conditions with safety and health the prime considerations. But the modern approach regards this as the starting point. In an age of machines a sound welfare policy must go on to foster good human relations if it is to justify the cost. Today, says the writer, human relations have "arrived" as manifested in the person and function of the personnel manager; but they have yet to become part and parcel of industrial life.

The personnel officer cannot do without his employee record files. But his special task is to ensure that no worker is treated as a mere card in the file.

Making Welfare's New Look Worth the Cost

By ROBERT DOUGLAS

IT was a favourite remark of Viscount Leverhulme that while the greatest achievements of the nineteenth century lay in the field technical advance, the great problem to be solved by the twentieth would be the human one—the man behind the machine rather than the machine itself.

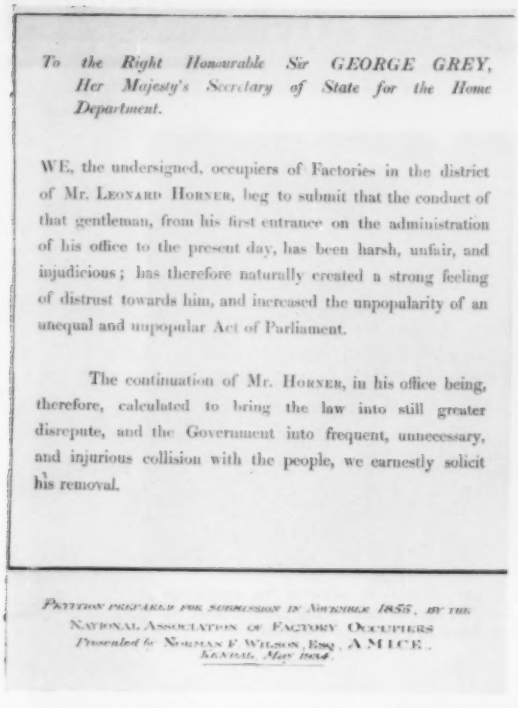
It is not a matter of coincidence, therefore, that a Commonwealth conference is being organised at this moment to study "the human problems of industrial communities within the Commonwealth and Empire," to quote the official title announced for the gathering at Oxford next year over which H.R.H. The Duke of Edinburgh will preside.

The question of the "welfare" of the industrial worker, and as a natural sequel the non-industrial, is one which gradually and almost imperceptibly has been arousing more and more interest in the minds of administrators and businessmen in recent years. And there can be detected at the same time a slight shift of emphasis away from the purely physical provision of amenities such as canteens, medical services, sports grounds, social clubs and the like towards the more psychological considerations of incentives and motives, or, as it is being termed, industrial relations.

That is not to imply, however, that the material side of industrial welfare is being neglected. On the contrary all signs point to the fact that welfare amenities and appliances are profusely on the increase, both as regards those directly linked with production on the shop floor and those of a purely "social" nature.

Of this, the forthcoming Factory Equipment Exhibition provides ample proof. This year's event, being staged at Earls Court for the first time, will be seven times larger than in 1953, and the vast majority of the 200 exhibitors will be showing products designed to make the worker's job easier and safer or to improve his working environment. Products range from canteen furniture, lockers, sanitary and hygiene fittings of all types to "Music While You Work" broadcasting systems, protective clothing developments and mannequin parades for industrial overalls.

Yet the modern idea of industrial welfare presupposes something above and beyond material provisions how-



To the Right Honourable Sir GEORGE GREY, Her Majesty's Secretary of State for the Home Department.

WE, the undersigned, occupiers of Factories in the district of Mr. LEONARD HORNER, beg to submit that the conduct of that gentleman, from his first entrance on the administration of his office to the present day, has been harsh, unfair, and injudicious; has therefore naturally created a strong feeling of distrust towards him, and increased the unpopularity of an unequal and unpopular Act of Parliament.

The continuation of Mr. HORNER, in his office being, therefore, calculated to bring the law into still greater disrepute, and the Government into frequent, unnecessary, and injurious collision with the people, we earnestly solicit his removal.

PETITION PREPARED FOR SUBMISSION IN NOVEMBER 1855, BY THE NATIONAL ASSOCIATION OF FACTORY OCCUPIERS
Presented by NORMAN F. WILSON, ESQ., A.M.I.C.E.
MANUAL, May 1904.

Early factory legislation was often extremely unpopular among employers who called it "interference". This petition of complaint against one of the first factory inspectors has today an honoured place in the Inspectorate Department.

ever necessary these may be. It is concerned with developing the principle "a man's a man for a' that", which is the touchstone of all sound industrial relations.

At the same time it does not do for the business administrator familiar with these developments to assume that much has been achieved in this direction as yet. What he may be tempted to take for granted, because he believes in it and does his best to apply it, may still be alien to thousands occupying positions equivalent to his, as indeed seems to be the case.

More often than not the question being asked and answered in the negative is, "Is welfare worth the cost?" And the evaluation depends more on the estimated increase in productivity that may be derived from the provision of amenities than on any altruistic desire simply to improve the lot of the operative. We should not be surprised at this. It is a marked modern tendency.

There is, of course, a statutory minimum of welfare services which an employer is called upon to provide, and which will be inextricably confused in any figures relating to expenditure. The Industrial Welfare Society, one of the specialist bodies in this field, lately carried out a survey of welfare costs which revealed a range of expenditure varying from about 17s. a year for each worker to nearly £70. This range did not always relate to the size of the company. The variation was naturally, however, closely connected with the needs of a particular firm as regards medical and canteen facilities, training and selection and all activities indispensable to the efficient operation of the modern industrial unit of production.

The survey also established that the average welfare expenditure represented about five per cent. of the wage bill. Needless to say, the firms included in the survey were in all probability more of the type to be described as "welfare minded".

But even allowing for any weakness in the sample examined, the figure may be taken as an average for an industrial community which embraces firms whose "prestige" expenditure on amenities is staggering side by side with firms which have pared down their expenditure to the point where morale among their workers has begun to suffer and the symptoms of labour discontent are only too evident.

The interesting and striking thing to be noted is that where the firm has decided upon a welfare programme there is seldom any indication of a desire to prune expenditure seriously.

Canteen Incentive

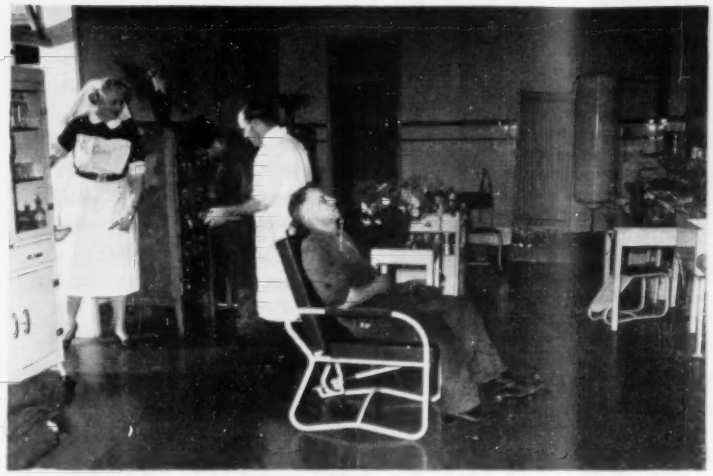
In the case of firms which are of sufficient size to permit the organisation of a canteen, for example, the attitude taken is generally that this is an important integral part of the concern which, so far from being restricted or discontinued, must be supported and improved in the face of increasing costs. And in many cases food prices in such canteens are well subsidised; not because the company thinks of such provision merely in old-fashioned charitable terms but because it is widely believed,

Welfare Facts and Figures

(Based on a recent I.W.S. survey.)

1. *Throughout industry as a whole, welfare costs range from 17s. a year for each worker to nearly £70.*
2. *Average spent on welfare per worker is about £17 a year.*
3. *The cost per worker of personnel departments ranges from nil to 104s. a year, the average being 35s. 3d.*
4. *The average cost of health and safety is about 27s. 10d., of education and training 9s. 10d. General services average 206s. 3d. a year for each worker.*
5. *Firms employing between 1,000 and 1,500 workers and those with a labour force of 10,000 or over would appear to spend the most per head on welfare.*

MODERN TREATMENT



This medical centre at Morrison Busty pit, near Durham, leaves no doubt in the colliery management's mind about its being worth the cost.

and with some justification, that it is a solid contributory factor to productive efficiency through improved health and morale on the part of the workers of all grades.

There is little evidence of firms closing down their canteens. The tendency is rather in the opposite direction.

Yet, as was suggested at the beginning of this article, no one involved in personnel or welfare work in industry has any need to feel complacent even if they are fortunate enough to have encountered only the better examples of factory or office organisation.

There are still a large number of "realists" among us who take a firm stand upon the belief that it is the amount in the pay-packet that counts. Up to a point they are right, and they are assisted in their thinking by the more dated minds among the trade union leaders.

Point Of Departure

But the point of diminishing returns to simple money incentives is reached sooner than is expected. It is at that point that the personnel officer is required to intervene. It is certainly there that the services of the executive, whose understanding of industrial discord goes deeper than the average businessman's, are needed.

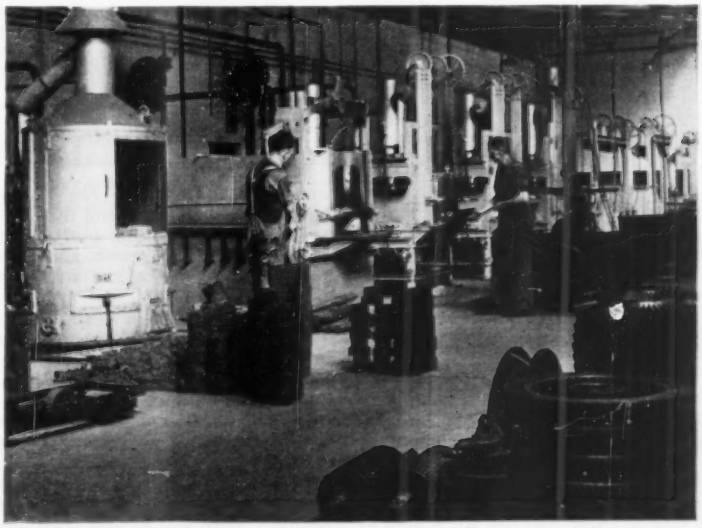
It is the personnel officer's responsibility (and the development of his particular art is a comparatively recent addition to the practice of management) to put into action the relatively vague desire of management to deal with the employee as an individual with personal feelings and problems in circumstances where he is only too likely to be reduced to the level of a mere production unit, a statistic. This represents that other aspect of welfare in industry which is now receiving so much more attention, and surely none too soon.

Is it definable and is its province to be only that of the very large firm who can "afford" it? The truth is that no firm can afford to do without it. But it must be founded in the first place *on good working conditions*. Without that foundation all attempts at fostering goodwill and understanding, at sharing profits or participation in control (which is an open invitation to bicker under such circumstances) are doomed to failure, to be exposed as the hollow shams they undoubtedly would be.

Modern welfare in industry, then, must be rooted in good working conditions, with safety and health as prime considerations even where the law is not explicit. And in addition the ideal which will make for smoother, more efficient, happier internal relations combines a sense of security in the job with well-being, a genuine desire to co-operate and a pride in achievement, with, if possible, opportunity for self-development, not necessarily within the firm, as Col. Urwick has urged elsewhere.

The human relations side of industrial welfare may have "arrived" as manifested in the persons and functions of the personnel managers, it has yet to become part and parcel of industrial life in general. We cannot afford to sit back.

GOOD HOUSEKEEPING



Good housekeeping boosts morale and production. Keeping a heat treatment shop clean and tidy is no easy task, but this one at the Motherwell factory of **Anderson Boyes & Co. Ltd.** shows what regular care and paint can do.

A course member gives his lecturette at an **Effective Speaking** session. This has proved one of the most popular sections of the course.

Begun as an experiment, this course for junior managers now forms an integral part of *Tube Investments'* training programme. Spread over several months, the course is so designed to fit in with the normal work of their young executives and gives them ample time for private reading and thinking. The company stress that a course of this type is well within the resources of a single firm of modest size.

How to Train Young Executives on the Job

By ROBERT McKINNON

IN October 1953 *Tube Investments Ltd.* launched a new type of training course for junior and middle managers, the object being to develop existing gifts and qualities rather than to pump into them a mass of new knowledge and theory. This course, which is operated on a one-day-per-week basis over a period of several months, was begun as an experiment and is still being modified in the light of new experience ; but results have been such that it now forms an integral part of the company's training programme.

The avowed aim of the experiment being to improve personal effectiveness, the Training Directorate planned a syllabus with the emphasis on the following features:—

1. Broadening members' grasp of the range and depth of management's responsibilities and of how these fit in to the general social and economic situation.
2. Making members more aware of modern trends in management and of the ideas and techniques which are available, and
3. Teaching them how better to put across their own ideas and opinions and to understand those of other people.

Thirteen members drawn from eight companies within the group went on the first course. Their ranks included many different types of "junior or middle manager", their ages ranged from 25 to 40, and their academic background from first-class honours degree to those who had left school at 14. Numbers were about equally divided between production men and those from other branches of industry.

The course itself was organised in three sessions, each comprising ten Thursdays in consecutive weeks, with breaks over Christmas and Easter. The first session was planned fully in advance, but the details of the second and third sessions were only settled towards the end of the preceding session. The programme could thus be adjusted to take account of suggestions put forward by members.

A full summary of the course is set out in the table on the opposite page and it will be noted that only seven hours out of 181 (excluding private work) were devoted to *The Human Factor*. On the other hand this topic permeated many of the case studies and individual view points and often came up in current affairs and other discussions.

All save three or four of the 30 days opened with *Current Affairs*. At first the quality of discussion was poor and the "spread of participation" uneven : at the end of the course there was a most marked improvement which first became really noticeable after the classes on *Effective Speaking* were in full swing. To begin with discussions were led by the course leader but later members were put in the chair and some sessions organised in the form of a debate. This proved most successful. Each week the *Economist* and the *Listener* were issued together with some background reading—some of it compulsory, some recommended.

Effective Speaking was considered by members to be one of the most valuable subjects in the programme. Ten two-hour periods were placed in the second session. In the current course they were started much earlier.

There followed in the third session *Short Talks*. Members were allowed to choose any subject and these ranged from a talk on the Fawley Refinery (see this journal, May 1954, p. 523) to a graphic account of how a works football team was built up.

For *Individual Viewpoints* speakers were drawn from among the directors and management of T.I. They gave their own "philosophy of the job", not text-book accounts of their functions, and supported their ideas with personal experiences. These talks were followed up by one of the *T.I. Case Studies* that were based on actual situations within the experience of the individual viewpoint speakers. They were not treated in true "case study" fashion, however. Course members were divided into two groups and each worked out its own solution. These were reported back, then analysed and criticised in the presence of the speaker and the course leader.

General Case Studies were selected from those in current use by the Birmingham College of Technology, and from the Newman Neame narra-

tives and I.W.S. filmstrips. These were conducted on orthodox case study lines, that is by discussion method and not via syndicate solutions.

The representatives of each company prepared a talk—illustrated by an organisation chart—on the history and activities of their own company. Each of these talks was followed by discussion in the light of E. F. L. Brech's work on *The Principles and Practice of Management* which, together with Graham Hutton's *We Too Can Prosper*, formed the main body of background reading prescribed for members' own time. Summaries of each section of Brech's book were issued to members.

Towards the end of the course each member was asked to write a spontaneous and critical review of its impact; if he so wished, he could remain anonymous. At the final session a detailed questionary and rating of each item was completed. The analysis of these papers has been of great help in modifying the present course.

In assessing the value of this course, the Training Directorate have taken the residential course as the yardstick of comparison. They stress, however, that there is plenty of scope and need for each. They sum up the advantages and disadvantages of the new course as follows:—

DISADVANTAGES

1. Delayed social integration of the group and the loss of off-duty exchange of ideas which takes place at a residential course.
2. The residential course means a break from routine and more or less complete freedom from the cares and worries of the job.

ADVANTAGES

1. The week's break between course days means plenty of time for private reading and preparation, and thinking.
2. It also enables purely informational lectures to be cut out of the programme.
3. Many firms can more easily spare a manager for one day a week for a few months than send him away for four or five weeks.
4. Durability of impact is greater. It often happens that a residential course is forgotten quickly.
5. A non-residential course of the type described slowly but surely becomes associated with the daily life of the member.

Finally, *Tube Investments* stress that a management development course of this type, possibly not so long and on a half-day basis, is within the resources of single firms of modest size. It is easy for senior managers to despatch their juniors to an outside residential course and feel that they have done their duty. But they are more likely to appreciate the importance of training if they themselves are closely involved through making a personal contribution.

The second course of this type is now being held (October 1954 to May 1955) on similar lines. A few minor changes have been made. The ten sessions on "Effective Speaking" have been placed earlier in the programme and this has resulted in a quicker development of individual confidence in discussion and of the "social integration" of the group. Brech's book is being divided up into shorter and more digestible portions and the discussions of it are being attended by experts in Production Engineering, Work Measurement, Costing, etc. The Current Affairs discussions have, with advantage, been cast into "debate" form at an earlier stage in the course.

T. I. MANAGEMENT DEVELOPMENT COURSE 1953/54

(30 *days on a one-day-per-week basis*)

Summary of Items

	Approx. time
1 Running a Meeting	11 hrs
2 Effective Speaking	20 hrs
3 Effective Writing	8 hrs
4 Current Affairs	18 hrs
5 Brech's book 'Principles and Practice of Management'	11 hrs
6 Hutton's book 'We Too Can Prosper'	3 hrs
7 Individual Viewpoints	13 hrs
(*a*) General	
(*b*) Production	
(*c*) Sales	
(*d*) Production	
(*e*) Small Companies	
(*f*) Personnel	
(*g*) Accounts	
(*h*) Secretarial	
8 T I Case Studies	30 hrs
(*a*) General	
(*b*) Sales	
(*c*) Production	
(*d*) Sales	
(*e*) Promotion	
(*f*) Accounts	
(*g*) Contract	
9 Human Factor	7 hrs
(*a*) General, and Matching Men and Jobs	
(*b*) Supervisor Qualifications	
(*c*) Interviewing	
(*d*) Why do people behave as they do ?	
10 Company Organizations	7 hrs
11 Short lectures by members of the group	7 hrs
12 General Case Studies - 5	8 hrs

	Approx. time	
13 Lectures	19 hrs	
(*a*) Economic Situation		
(*b*) Trade Unions		
(*c*) Arbitration and Conciliation		
(*d*) Research and Development		
(*e*) Training		
(*f*) Welfare		
(*g*) T U C		
(*h*) House of Commons		
(*i*) Office Methods		
(*j*) Factory Law and Safety		
(*k*) Publicity and Advertising		
(*l*) City of London		
(*m*) T I Director		
14 Works Visits	12 hrs	
(*a*) A small company	2 hrs	
(*b*) A steel company	4 hrs	
(*c*) A large mass production engineering company	6 hrs	
15 Miscellaneous	7 hrs	
(*a*) Ergonomics	3 hrs	
(*b*) Financial Structure of a Company	2 hrs	
(*c*) Management Manners	2 hrs	
		181 hrs
16 Private Work (estimated average)		
(*a*) Brech	40 hrs	
(*b*) Hutton	10 hrs	
(*c*) 'Economist' and 'Listener'	40 hrs	
(*d*) Other preparatory work, lecturettes, organisation, speaking, writing	20 hrs	
	110 hrs	
	181	
Grand Total	291 hrs	

Courses in porcelain painting are held at the mill at the company's cost.

After the workers' holiday season, the mill holiday home is turned into a camp for their children for 4 to 5 weeks. The cost to employees is only 2/10d. a day for each child.

This Firm Runs its Own Welfare State

By GEORGE WILLIAMSON

In a part of Sweden where the competition for labour is very strong, the *Malmoe Strumpfabrik* manages to keep the bulk of its workers. It does this through an imaginative welfare programme whose main features are described here. The programme differs from most British ones in that it extends deep into the social life of the employees.

HOW far can you go to build a stable labour force? *Malmoe Strumpfabrik*, which with 95 full-fashioned knitters and 500 employees is Scandinavia's largest hosiery mill, has succeeded in keeping its labour turnover below 15 per cent.

Against a strong competition for workers in a city of 200,000—and the city has 539 industrial firms—this mill finds it relatively easy to get workers as well as to keep them. And the brunt of its turnover is not in skilled but in young unsettled workers.

In Sweden as a whole, where many industries have a labour turnover of 50 to 80 per cent some years, due to what the Swedes call over-full employment, and where the textile industry alone depends on imported labour for one-eighth of its production, a factory that can hold annual turnover to 15 per cent considers it is doing well.

The big factor behind Malmoe's efforts to keep down labour turnover is the high cost of training skilled workers. In some years the mill has had to train as many as four knitters to get one, with the same ratio in the training of seamers. Therefore, the management feels that money put into holding its workers is well-invested.

The Malmoe mill holds its workers by operating a small-scale welfare state. Some years ago an opinion poll was taken among Swedish workers, and the results present the key to Malmoe Strumpfabrik's employee-relations programme.

To the question: "What does the worker consider the most important factor in his job", the answers ranked in the following order:

1. To like the work and find a good spirit among one's fellow workers.
2. To work in a modern building with light, cheerful rooms.
3. To make a good salary.

Malmoe Strumpfabrik's employee-relations programme consists of some 25 separate or interlocking "social" services in the fields of health, education and recreation, that put

Swedish (Welfare) Rhapsody

the emphasis on the first two desires of the Swedish worker. None of this company's "social" measures were pressed on the firm by the workers. As a matter of fact, this was one of the first companies in Sweden to offer these services to its workers. Even before World War II the firm had started most of the services, with the first dating back to 1932.

In general the company pays about three-fourths of the cost of the programme, while the workers pay about one-fourth. Some costs are to be considered as usual expenses for the firm, and some services are financed in such a way that they are allied with community or state services.

For example, the hospitalisation insurance fund is not a part of a private insurance company working on the "group" principle. The mill's group is a member association in a national organisation that is backed by government finance. Also it should be pointed out that hospitals in Sweden are tax-supported and cost only about 1s. 6d. a day for bed and treatment.

While some of the educational courses offered by the mill are paid in full by the company and are limited to workers in this mill, many of the courses are offered as adult education courses by the public schools or by community organisations. Thus, the cost of the courses is spread over a large number of students in the community. The tuition fees, paid in part by the mill, are much smaller than would be the case if the mill operated wholly private courses for its 500 workers. The classes, of course, are seldom attended by more than 50 workers, but they are open to the whole force.

Personnel needed to administer the social services is kept to a minimum by dividing the duties up among superintendents and department heads. The company cashier, for instance, is also cashier in the hospitalisation fund, while the sales manager is chairman of the company art club. The doctor is retained on a flat-fee basis.

The only full-time employees required by the programme are the nurse and the personnel consultant, the latter tripling as superintendent of some of the social services, employer of new women personnel, and mother-confessor to the workers, about two-thirds of whom are women.

The table of the services offered by the mill indicates something of their scope as well as giving an idea of their cost to the company.

SERVICE	PAID BY WORKERS	PAID BY FIRM
Hospitalisation Insurance Workers get a free room in hospital, specialist care and dental attention from 8½d. to 1s. 5d. a week. Every worker is obliged to join this scheme.	85%	15%
Chest X-ray Every Second Year Mill pays 70% of cost and municipality pays the rest. Every new worker is X-rayed before being engaged.		100%
Eye Testing Several departments are tested each year, a specialist being hired on a flat-fee basis. Workers get their glasses at a 10 to 20% discount.		100%
Canteen Workers pay for food and cooks on a co-operative basis, averaging 1s. 5d. to 1s. 8d. each per meal.	Food and cooks	Premises, Equipment, Supervisor.
Hot Meals for Young Workers Workers under 18 get hot meals for 4d. as an assurance to parents that they are getting the right food.	25%	75%
Art Club About 500 members, including wives and husbands who each pay about 10s. a year. The mill equals their total contribution.	50%	50%
Educational Courses Held at the mill .. .. Community sponsored courses .. .. .. Courses held at mill include painting, drawing, art appreciation, economics, language and bridge. Community courses are held at night school and cover domestic science, home nursing and baby care.	10—50%	100% 50—90%
Paid Vacation Five women workers chosen every year for a free holiday at a vacation home. The State pays the cost of transport and room: the mill pays for the board.		100%
Foreign Study Tours Every year two male workers, one chosen by the union and one by management, are sent to a foreign country to visit textile mills and study conditions. A junior manager generally goes with them.		100%
Holiday Home Firm maintains a country house in its own grounds which can accommodate 40 at a time. Cost per person includes three meals per day.	5s. 8d. a day	Maintenance.
Children's Bank Book A bank book with £7 presented to every child born to an employee.		100%
Worker's Loan Fund Firm operates a fund to lend money to workers needing immediate cash. Repayment from wages over 3 months, no interest charged.		100%
Personnel Manager Duties include operating loan fund and lending a hand with sick workers who live alone. Has about 3,500 visits a year.		100%
Colour Conditioning The mill is completely colour conditioned with the emphasis on the warm and the cheerful. Paintings are hung on the walls to break the monotony, whilst use of curtains and plants in windows make mill more homelike.		100%
ENTIRE SOCIAL AND WELFARE PROGRAMME	25%	75%

Where Older Workers Can Take It Easy

ROLLS ROYCE LIMITED have introduced at Hillington, Glasgow, a scheme whereby workers over 65 can transfer to a special department where work is less strenuous than in the normal production line plant. The intention is to permit such older workers continuous employment free from the stress and strain attendant on routine production.

The response so far has been encouraging although numbers are as yet not very large. These employees enjoy certain facilities such as a slightly later start and earlier finish taking them away from the peak transport hours. They also operate on a time basis as against piece work. Employees who remain after 65 draw no N.H.I. retirement pensions, but at 70 receive the full pension at an increased rate and normal wages.

Transfer to this section is a voluntary matter, and although the scheme has been working only since May, 1954, enough experience has been gathered to indicate that the system is welcomed by those workers who have taken advantage of it. They admit that they are suffering strain in attempting to hold the pace in the normal production line and find the quieter atmosphere of the section more congenial.

The range of work covered includes gauge making, precision hand tapping, light drilling, light assemblies, inspection, salvage work, machine engraving, box making and general light repair work. The really important aspect of this work lies in its ability to keep in continuous employment, highly skilled men who might be forced by a slowing up of their physical capacity to leave production line work.

Why The Small Firm Retains Staff Loyalty

REVIEWING the activities of the smaller firm, the annual report of the I.W.S. for the year ended June 30, 1954, says that there are 51,008 establishments employing fewer than 250 persons, and that these firms account for nearly 40 per cent of the industrial population of Britain. That small firms can retain the loyalty of their workers in spite of indifferent working conditions is attributed to two main factors: 1. These firms often employ a high ratio of skilled men who find an intrinsic satisfaction in their trades; and 2. The close contact with the owner or manager is valued by their employees. They know from day-to-day how the firm is doing and there is a true feeling of "belonging".

In connection with the large firm, however, a large number of employees feel that their relationship with the company is impersonal. Members of the management hierarchy are, on the whole, unknown to them, and the delays in decision and the simple problems of communication cause much frustration on the shop floor.

Among the major contributors to the industrial peace which has been enjoyed in Britain since the war, compared with the equivalent period following the 1914-1918 war, the report lists the personnel officers and the managers.

Discipline By Consent

"WHATEVER it was in the days of the bowler-hatted foreman, discipline is nowadays a matter of consent", said Mr. D. W. Collier, a managing director of *Cadbury's*, at an Industrial Co-partnership Association luncheon on February 10.

Mr. Collier, who was speaking on "Industrial Discipline", gave an account of the Bournville Works Council which was formed 36 years ago. The organisation was based on a shop committee in each department of works and offices, formed of the departmental management (two or three people) and elected workers' representatives on a basis of one to ten.

The factory was then divided into nine groups of functions, each sending an elected representative to the Council. The management provided a like number, two of which had always been directors, and three foremen.

Recruiting Abroad

AS the result of a shortage of British science and engineering graduates, a leading industrial organisation, *English Electric Co.*, of Stafford, have been compelled to recruit some of their senior technical staff from abroad.

Recently (states the *Manchester Guardian*) the firm placed advertisements in Rome newspapers offering "numerous posts" to qualified Italian engineers and electrical engineers. A footnote explained that university graduates are preferred. Last year the same firm advertised posts in France, Italy and Switzerland. They state that at present they are recruiting about 160-200 graduates a year, a quarter of them from abroad. The posts now being advertised in Italy are for men aged between 25 and 45 who are being offered salaries ranging from £700 to £1,200 a year.

Works Tours

SOME of the employees of *T. J. Smith and Nephew Ltd.*, Hull, asked if members of their families could visit the factory. The management saw the advantages—especially as the company employ a large number of girls straight from school—but decided that the usual type of "open day" would be too informal; it would be better, they thought, if the visitors saw the factory in full production and without "window dressing." So they evolved the more ambitious scheme which is now in operation.

Every Tuesday afternoon, a party of 25 visitors—all close relatives of the workers in one department—make a two-hour tour. They are greeted by the works relations officer and introduced to the works director, who explains the scheme's objects and outlines the company's history and activities.

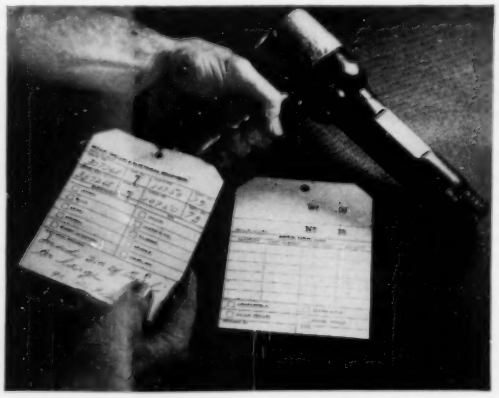
Their first call is at the department in

Tool Repair Tag Saves Time And Cost

AT the plant of the *Temco Aircraft Corporation* in Texas, a new kind of 4½ by 5½ in. tool repair tag is helping repairmen pin-point standard small tool faults.

Names of parts in which air and electrical tool breakdowns most frequently occur are printed on one side of the card. The operator merely checks the part he finds defective, and his tip is passed along—by means of the tag—to the repairman.

Repairmen, in turn, go directly to the cause of the trouble instead of first having to find it. This has meant a vast savings in maintenance time spent on the 150-odd types of small tools used at the plant.



Savings of another kind are provided for on the back side of the tool repair tag. Here is a replacement parts ledger form on which the tool crib clerk can post a running inventory of parts used and the balance remaining in stock.

This feature has cleaned the main tool crib shelves of bulky files formerly used for tools and parts records. It has shortened records posting time by about two or three hours a day.

The front cover of the new staff handbook for employees of **Chappie Ltd.**, manufacturers of dog and cat food. The booklet is designed to slip into pocket or handbag.

which their relatives work. They meet the supervisors and are then taken individually to their relatives' workplaces. Beforehand, they are warned that production must continue as usual. The company have found that the disruption of routine work is, in fact, slight.

After about ten minutes the visitors are collected into a party again and commence a general tour of the factory. This is followed by tea in the canteen; executives of the company are present to answer questions. ("**Business**," January, 1955.)

Service Awards

A DERBY furniture and bicycle dealer (Mr. Arthur Osborne), who owns five stores, has appointed 16 of his senior employees company directors, dividing among them shares worth £2,700. Eleven of the new directors who have been with the firm 20 years received 200 £1 shares each, and five with 10 years' service were each given 100 £1 shares. When Mr. Osborne retires the new board of directors will carry on. "They have served me faithfully and well", he said, "and I know that they will carry on the business in the traditions we have created together".

Executive Rises

OVER the past five years, according to the American Management Association's fifth annual survey of executive compensation, the average aggregate compensation of all officers and directors of American corporations increased by 23.5 per cent. During the same period, company profits, after taxation, went up by 28 per cent, and sales by 60 per cent.

Based on an analysis of payments to nearly 20,000 executives in some 2,500 companies, the report reveals a variation in the degree of increase in the various industrial groups ranging from 8 per cent to 29.4 per cent.

HOUSE MAGAZINE DIGEST . . .

Other Firms' News And Views

Safety Slogans

Here is a simple and interesting competition, which gives you the opportunity of helping others to be accident-conscious, and, incidentally, helping yourself to a cash prize. Everyone knows the value of a slogan. During the war, for instance, we heard "Careless talk cost lives," and "Be like Dad, and keep Mum." Simple, short and snappy, but with a wealth of meaning.

Now we invite you to let us have your slogan. It may take the form of a short sentence, or it may be a rhyming couplet. But it must have some bearing on the prevention of accidents in the factory. (**The Glenpatrick Journal,** Autumn, 1954.)

Safety Conscious

There was an exceptionally good response from the Foot Safety Week organised at the Harlesden factory recently. Orders for nearly 200 pairs of industrial boots and shoes were placed. This shows that employees are growing ever more conscious of the necessity for taking advantage of the safety precautions which are made available for their benefit. ("**57 News**," 1/55.)

Arctic Hotel

The hotel (at Njord, Northern Norway), where I was given a very comfortable bed-sitting room, was the first of many surprises to come, for I found out it was owned and managed by the company—a *Unilever* hotel in the Arctic! Not only did they own the hotel, but the town's only general store and its post office, and they had built most of the houses for the town's 600 inhabitants who depend on the industries of Njord for their livelihood . . . I found on being shown round the factories that they were all equipped with the latest machinery, and the methods of production were of a very high standard. (**Mac Matters,** 12/54.)

Spreading The Load

Under our contract with the British Broadcasting Corporation for the production of *Radio Times*, we are now required to install the extra plant to produce up to 10 million copies per week of 76 pages.

In addition to our Park Royal Factory a new site in Scotland has been selected in order to comply with B.B.C. policy of decentralisation of the production of this weekly periodical, to give more economic distribution, and to cope with the shortage of labour which exists in the London area. (**Waterlow's House Magazine.**)

Tell Where You Are

Why not tell your mother, landlady or wife (or husband) where you work, your clock number, your department and the name of your foreman or manager. If they have to telephone urgently for you, the Employment Office can then find you quickly. The other day, for instance, somebody wanted to speak to Mr. Jones. There are 125 people whose name is Jones in Vauxhall! (**The Vauxhall Mirror.**)

Helpful Medium

Throughout the country more and more people are turning to the sound film as an aid to teaching, selling and generally communicating ideas; our company is no exception. Last year, in addition to four issues of the Company's film magazine "Panorama", several films of a more specialised kind were made. These included two first-aid teaching films made for the Medical Department of General Chemicals Division. These films were quickly and inexpensively made, and it is hoped to make several more this year. (**I.C.I. Magazine.**)

Music While You Eat

Our Thorncliffe Musical Society are currently presenting an excellent example of the gentle art of providing pleasure for others. We refer, of course, to the monthly lunch-time recitals in the welfare hall, which are proving so popular. Any fears about the reception of such a novelty have surely been dispelled by the enthusiastic support at every performance so far. (**Thorncliffe News.**)

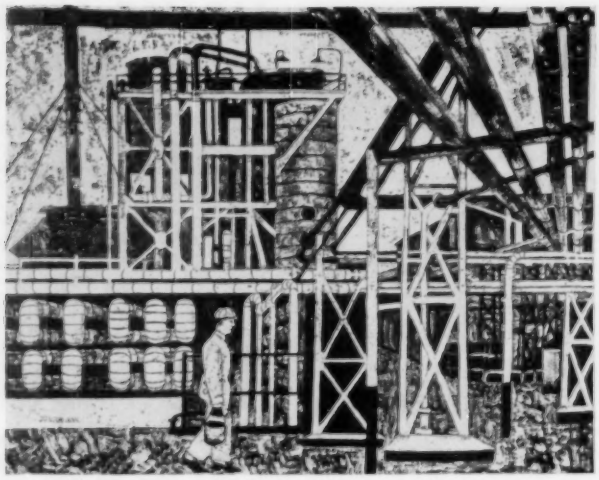
NEW HOUSES FOR WORKERS

Dame Evelyn Sharp, Deputy Secretary of the Ministry of Housing & Local Government, at the opening of the Crayford housing estate for employees of **Frederick Braby & Co. Ltd.** Others in the picture are Mr. L. Taylor (a Braby employee) and family and Mr. F. C. Braby, chairman and managing director.

An Industry Helps the Young Artist

By PAUL NUGAT

Can industry help art and can the artist make a worthwhile contribution to industry? To find out, the *Shell Petroleum Company* recently commissioned some 50 young artists to paint any aspect of the oil industry they chose. The company paid all expenses and bought most of the paintings. These, says the writer, betrayed a superficial view of industry, but there is no question of the experiment having been a failure. Better pictures will come when artists spend more time studying the human aspects of work.



"Mexphalt Plant", Shell Haven Refinery, by Alfred Daniels, was one of the best pictures. **Shell** take the view that the artist has his own special part to play in interpreting vital industries to the public.

THE conception of industrial welfare has so broadened in the scope of its activities as well as in its thinking, that a strong case can be made for the patronage of the fine arts without having recourse to pleas for charity for insolvent artists. The case should stand or fall by the test of whether or not the artist can make a worthwhile contribution to industrial life; whether he can synthesise his private vision of that life and the meaning of that life as felt and lived by the millions who make up its daily scene.

In sponsoring "The Artist's View of an Industry," the *Shell Petroleum Company* gave concrete expression to the viewpoint that there were many aspects of its work which could be best illustrated in such a way.

The practical steps they took were to commission some 50 promising young artists (35 of them British), none of whom had yet established reputations, to paint any aspect of the oil industry they wished to select. Complete freedom in the choice of subject matter also extended to treatment, style, and medium. Their work could take the form of oil paintings, drawings, water colours, engravings and lithographs.

Still further, in order to remove the last vestiges of the artists' natural suspicions that their work might be exploited for some "base" purpose, *Shell* placed the selection of the artists and the selection and rejection of their works into the hands of an independent committee including Sir John Rothenstein (director of the Tate Gallery), Professor William Coldstream (Slade School of Art), Mr. Philip James (art director of the Arts Council), and the heads of several other colleges of art.

All Expenses Paid

The economics of industrial patronage will interest firms who might want to follow in *Shell's* footsteps . . . though perhaps on a more modest scale. Rail fares, hotel bills, bus and taxi fares, luncheons and reasonable living expenses, canvas and stretchers, and the cost of framing all the accepted exhibits, were all paid by the sponsor at an average cost of £25. Generally speaking, an industrial sponsor with a less widely dispersed industry could expect lower expenses, especially if patronage confined itself to commissioning promising artistic talent within its own region.

By paying all the expenses, *Shell* naturally reserved the right to buy or reject all the works. Of the British entries, they accepted 70 and rejected 43—though some of the rejects were purchased by the company, but not for the exhibition. All the acceptances were bought outright by the company and the copyright is now theirs. Payment ranged from £15 to £70, prices which compare favourably with current gallery prices.

A Strange New World

How good are the paintings? With a very few exceptions they are unexciting and display a rather superficial view of the industry, such as one would naturally expect from people totally unfamiliar with this world. That is not, however, tantamount to saying that *Shell's* experiment has been a failure. Far from it! It merely confirms what has been written so often about the meaning of inspiration to painters, namely, that great creative work is a fusion of the familiar object, view, etc., and the artist's imaginative gifts.

"Strange New World," the title of one picture, expresses verbally and visually (in its confusion) a majority sentiment of these artists. Here was

too much for the eye and mind to come to terms with in the space of a fortnight (the average time spent on his chosen location by the artist).

And I would suggest that the time factor was the one weak point in *Shell's* admirable conception of enlightened patronage and accounts for the many technically competent but unfeeling pictures dominated by the paraphernalia of equipment. It is true that Donald Hamilton-Fraser succeeded in investing his two paintings "Cross Section of Furnace" and "Rectiflow Plantforms," both of which are power-of-industry conceptions, with a pleasing sense of colour, but on the whole the pictorial contents might have been selected by any lay visitor to the refineries with a reasonable sense of composition.

The very absence of a single British picture reflecting the life of the oil workers controlling this highly mechanised industry, taking a meal in the canteen, building a tanker, mopping a brow after handling the barrels of oil, seems to indicate that more time in the industry is necessary to artists, before they have the confidence to deal with the human aspects of work.

Ideally, the pattern of future patronage will perhaps seek to enable artists to live the life of industry for a few months and help them to bridge the present huge gap between their private studio lives and the main stream of more ordinary people. Obviously, in these circumstances, patronage would be on a less generous scale than *Shell* has offered. A medium-sized firm could not afford to commission more than one or two artists to paint their industry under such conditions, because the firm would have to support them financially during this period. But, if patronage spreads, the total effect on the development of painting in our industrial society, which is the distinctive feature of our age, will be to bring closer together the artist and his public for the enrichment of both.

To Go On Tour

"The Artist's View of an Industry" exhibition opened at the Royal Water-Colour Society's Galleries in London. *Shell* are to tour this exhibition around Britain and the Continent and they are hopeful that it may be on show at the Edinburgh Festival. Finally the collection will be dispersed, and some of the pictures will certainly be hung, where employees have the opportunity and the leisure to study and enjoy them.

A New Policy for Industrial Sports Clubs

By G. A. McPARTLIN, M.A.
Senior Technical Officer, Central Council of Physical Recreation.

At present industry is not getting its money's worth from sports clubs. Bad organisation and lack of ideas have bred apathy. Yet, properly run, these clubs can do much to promote good industrial relations. Here, then, an expert puts forward an imaginative blueprint by which management can reorganise the social life of the firm to the benefit of all concerned.

ARE industrial social and sports clubs worth while? Do they make a real contribution towards better health, greater work-time efficiency and a fuller enjoyment of life among industrial workers?

In 1952, sixty firms—ranging from the large concern with many thousands of employees to the small family business—answered a questionnaire on this subject prepared by the Industrial Welfare Society. They were firms with a good reputation for welfare provision and numbered among them some of the most enlightened managements in industry. Although wide variations in practice were noted, the replies showed that these clubs have much in common. They usually represent a partnership between management and employee. Management gives generous help with the provision of facilities and makes substantial contribution towards maintenance. The workers contribute about 2d. each week, invariably by means of a deduction from wages. Income is supplemented chiefly by the bar profits and by the proceeds of dances and lotteries. Budgets vary according to the size of the firm but in some cases the bar takings alone amount to many thousands of pounds annually.

Membership.—Full membership is usually only available to employees. Relatives are sometimes allowed to join and occasionally friends are tolerated. The proportion of employees who are members of the clubs is high—between 70 and 100 per cent.—but the proportion who actually

use it is low. Two out of three members rarely, if ever, make use of the club amenities or take an active part in the various sections.

Programme. — Among outdoor activities, soccer, cricket and tennis are provided by almost every club. Then, in descending order of popularity, come bowls, netball, swimming, athletics, angling, hockey, golf, cycling, rugby, archery and rounders, with rambling, baseball, rowing, padder tennis, flying and sailing straggling a long way behind.

Indoors—table-tennis, dancing and darts are most common, followed (again in descending order of popularity) by billiards, snooker, card games, dominoes, chess and badminton. Boxing and gymnastics come very low, while weight lifting, skittles, basket ball, rifle shooting, judo, fencing, squash and deck tennis are provided in only a few cases.

Dramatic, operatic and music groups are included in more than half the clubs. Just under half have gardening, photography and libraries; and fewer still have art, hobbies, handicrafts, car and cycle sections. Here and there one finds the unusual section such as "Fur and Feather" clubs, philately, model car racing, pig clubs, Bible classes, quiz competitions and St. John Ambulance units.

Management.—There seems to be a general lack of interest on the part of employees in their own club affairs. Secretaries report great difficulty in getting good committee members and the word "apathy" is frequently on their lips. Surprisingly few employees use the clubs and, of these, most patronise the bar or take part in the occasional special social event. **On the face of it women get a raw deal—in most clubs most money is spent on men's sections like soccer, cricket and darts.**

There is little or no provision for introducing new activities or for encouraging young workers to learn new sports. Only 19 of the 60 clubs make any use of the coaching schemes organised by the various sports governing bodies. Nine of these provide athletic coaching, seven tennis and cricket, five soccer and two netball. Archery, hockey, swimming, squash, table tennis and badminton were each coached in only one club. More than half the clubs made no arrangements for coaching at all, and had no specific means by which they introduced new sports or recreational activities. Generally speaking, liaison between the industrial clubs and the local specialist games and sports clubs is poor.

The picture given by these replies is disappointing. Industry is not getting its money's worth. And yet a properly organised club could be conducive to the health and happiness of the worker, promote industrial morale and contribute to the well-being of the community.

A Broader Basis

The basis of the club should be broadened and as much time, money and effort devoted to providing opportunities for novices and beginners as is at present spent on equipping and fielding a few teams catering for a small percentage.

Apart from supporting the club, management has an additional responsibility. Most youngsters leave school at fifteen having had very limited opportunities to practise games and sports. Almost every healthy boy or girl enjoys one kind of activity or another.

Opportunities for making the young workers aware of a wide range of activities must be provided in the form of film shows, practical demonstrations or by helping them to take part in training holidays at national recreation centres where expert coaching is provided. This should be the direct responsibility of management, although, in discharging it, the aid of the sports and social club should be enlisted.

In the interests of good relations and as a means of integrating the club with the life of the community, the works' playing facilities should be made available to help in some measure to offset the serious shortage of playing fields. Most industrial facilities are only used at the weekends and, subject to adequate precautions, could stand a great deal more traffic without reducing the value to the club.

But the most important step towards an effective recreational programme is the appointment of a first-class man to be responsible for organising the programme, and advising the firm on policy. The work requires men of top grade calibre. They should be capable of holding their own in discussions at managerial level. Obviously, a small firm cannot afford a full-time man, and the duties may have to be combined with others. Where this is the case, management should make sure that the man appointed is really interested in this work.

The industrial social and sports secretary or organiser must have a good educational background, proven organising ability and preferably some industrial experience. He should have a good grasp of modern practice in the field of physical education and recreation; know the policy and methods of the official bodies of games and sports and recreation; and be a sound administrator. Outstanding ability as a player, while helpful, especially in the making of contacts, does not compensate for any lack of organising or administrative ability.

Holland recognises the importance of these appointments to the extent of providing a two-year course of professional training under the aegis of the Dutch Ministry of Education at the Central Institute for Sport near Haarlem.

In Britain recruitment of men for these posts is rather haphazard and their training is sketchy or non-existent. Considering the fairly substantial amount of money devoted to recreational work it would pay management to see that the man responsible for its guidance is of a calibre and status high enough to ensure results.

How to Make Your Sports Club Pay—

1. **Appoint a top-grade man to develop and run the recreation programme.**
2. **Make use of coaching schemes organised by the various sports governing bodies.**
3. **Merge your programme with the recreational life of the local community.**
4. **Pay special attention to the needs of youngsters and novices. Introduce other sports for those with no ball sense.**
5. **Use films and practical demonstrations to create an interest in new sports. Publicise the work of national recreation centres.**

How We Made Our Sick Fund Really Work

By R. B. BOYNTON,
Personnel Manager, Reynolds Light Alloys Ltd.

Running a works sick and benevolent fund can be a source of constant irritation and trouble unless the scheme is properly organised. Here, then, is an account of how one personnel manager solved the problem. The solution ensured fair shares to all needing help, saved the workers cash and involved practically no extra work.

WE are manufacturers of aluminium and aluminium alloy sections and tubes and form part of the Aluminium Division of *Tube Investments Ltd.* Our employees total about 750, mostly male. We have no female labour in the works proper.

When I was appointed personnel manager with the company, I was greatly concerned to find that it was the practice in the works to have collections in aid of employees who were absent sick for any length of time. This went on in spite of a Works Sick and Dividend Club with a 60 per cent. membership. These collections did not appear to be confined to the particular department and the amount collected appeared to be largely influenced by the popularity or otherwise of the absent work-mate. I also found that when permission was given to a recognised charity to hold a flag day collection on the premises, the actual collection was time wasting and the result poor.

After a deal of thought I had this problem placed on the agenda for the next Works Advisory Council meeting and invited discussion. I soon found that all the shop representatives would welcome a scheme to eliminate these indiscriminate collections. It was agreed that I should endeavour to submit a scheme for the next meeting. At the next meeting I put forward the following scheme—

1. That we create a Works and Staff Charities and Benevolent Fund.
2. That employees agree to a deduction of twopence per week from wages.
3. That an agreed sum of money is paid in one amount to an employee after being away from work for an agreed number of weeks certified sick.
4. That this sum can be applied for by works and staff personnel after the number of weeks away needed to qualify. No questions to be asked concerning the applicant's income from any source.
5. That monies in the combined fund at the end of the year be distributed (in regard to a necessary balance) to charities.
6. That all collections in aid of employees and for charities cease.
7. That this fund be administered by a sub-committee from the Advisory Council with staff representation.

R. B. Boynton.
"We had only three refusals."

A slip explaining the scheme was put in all wage packets and to give you the exact result we had three refusals from 730 employees.

The basic rules under which the scheme now operates are:—

1. £5 benefit after six weeks' absence.
2. Sickness to include works accidents.
3. Qualifying employment period three months.
4. Maximum benefit in one year continuous or otherwise £15.
5. The committee to meet *once a year* to discuss donations to charities from the fund.
6. Rules and payments can only be altered or amended by the Advisory Council.
7. No employee can apply to this fund for any benefits outside the rules.

This fund started in 1953 and in that year £90 was paid to employees and £80 to charities. In 1954 we paid £320 to employees and no balance was available for charities. To avoid altering rules or benefits we have asked the employees for an extra penny per week for this fund. The response has been 100 per cent. We have also added an extra rule for £5 death benefit under certain circumstances. We have also by general consent lifted the ban on a collection for one cause, i.e., Poppy Day.

There is practically no extra work involved in the running of this scheme. The time office inform the personnel department when an employee has been away for six weeks. The department then issue a chit on the wages office to authorise payment of benefit. The deductions are made in the normal way and go through the company's accounts, and charities receive their donations through the company.

It is fair to say that we made one mistake in that the balance we kept in hand from 1953, a light year for sickness, was not sufficient to allow for the heavy year we had in 1954. The main reason for the increased contribution of one penny per week is to ensure the fund functions as intended and that charities do benefit. We have no wish to regard this fund as a benevolent fund only.

The scheme is extremely popular with everyone and to quote one of the foremen, who are usually the first to be asked to give to collections, "this scheme must have saved me a lot of money since it started." My own personal satisfaction is that I know everyone receives the *same* consideration and help.

Send In YOUR Story

This article was written in response to our recent invitation to readers to tell us in their own words how they tackled a personnel problem which cropped up in the course of their jobs. We are always glad to have these stories which should range between 1,000 and 1,500 words. Payment at our usual rates will be made for each one published.

Three Ways Of Solving Shop Floor Differences

How Management Can Use The "Integrated Solution"

WHEN you disagree with someone how do you settle your differences? Do you, for example, use the authority of your senior position and insist that the argument be settled in your favour? There is a well-known report of an argument between Stalin and Kardelj, Tito's Foreign Minister, about the meaning of "Benelux". Stalin said it meant "Belgium and Luxembourg". Kardelj said it meant "Belgium, Netherlands and Luxembourg". "No!", said Stalin. "But look at the name", argued Kardelj, "*Be*lgium, *Ne*therlands, *Lux*embourg". Stalin exploded, "When I say 'No' it means '*No*' ".

Or what about the foreman who was interviewing Jim, one of his workers, who was not turning out enough work. Jim said he didn't like working on the machine to which the foreman had transferred him. "I like it on the old machine," he said, "I understand it, and I can fix it when it goes wrong —and they're nice chaps at that end of the shop".

The foreman explained that he had to get the order out to time and that if Jim produced more he would earn a better bonus for himself. Jim said that his output would be better when he was put back on his old machine. The foreman replied: "Look here Jim, I've stood about enough from you and now you're going to learn a thing or two. We're going to get that order out and you're going to do it. If you won't do it for your own sake then you'll do it because I'll be around every half hour to see that you do. And now go back and get on with it."

Both Stalin and the foreman were attempting to settle a disagreement by using their superior position to dominate the other person. Mary Parker Follett, a well-known writer on human relations, calls this "solving conflict through domination".

There is a second way of solving conflicts which we often choose. We compromise. So if you want to go to one film and your wife to another, a compromise might be to go to a third film, which neither of you particularly wants to see. A compromise solution means that both sides to an argument give up some part of what they really want and so neither is really satisfied. Wage claims are usually settled by reaching a compromise solution.

A better course is to reach what Mary Parker Follett calls "an integrated solution". Here both sides get what they really want but not necessarily what they first asked for. This type of solution is more efficient and aids progress.

Such a case is reported in "Joint Consultation" published by the N.I.I.P. A firm wanted more production from its existing machinery. The traditions of the industry would not allow the introduction of a two-shift system. The management put this problem before the works council, and an integrated solution was found. The works council suggested the introduction of an evening shift for married women. This pleased both present workers and new recruits and satisfied the firm as the weekly figures showed an increase in production.

An integrated solution cannot be found for every disagreement; such solutions could, however, be found more often and on a wider variety of controversial subjects if both sides were prepared to give it a try. Domination or compromise seem to be more popular methods at the moment.

Could some of you write to me and give me examples of disagreements which have been settled in any of these three ways? What kinds of problems arising in industry today do you consider suitable for integrated solutions? Send me a list of five such subjects (with perhaps a short explanation as well) and we can compare your lists another month.

A reader wrote to me a month or two ago describing a disagreement he had with his section over the question of rejects. This is a common source of conflict in industry so his case may be of interest to many of you.

He said that the practice in his shop had been to give a faulty article back to the worker who had assembled it, who then put it right in his own time. (i.e., at a flat rate payment with no bonus). The workers felt very frustrated by this practice as they complained that it "interrupted" their present work. Feeling ran very high.

The foreman solved the conflict by changing the system. He gave the job of re-assembling the rejects to one man who was called the "trouble shooter". The *time* this man spent on putting the reject right was still charged up to the worker who was responsible for the original fault. The group agreed that the new system was quite fair and liked it because they were free from the constant interruptions.

Last week I mentioned this incident to another foreman and surprisingly enough he said that he had had just the opposite experience. (Does one solution of a human problem ever apply in all other cases?) In his

3 WAYS OF SETTLING DISPUTES

1 **BY DOMINATION.** Where the boss says: "Do this because I tell you."

2 **BY COMPROMISE.** Where both sides give up part of what they really want.

3 **BY INTEGRATION.** Where both sides get what they want but not necessarily what they first asked for.

Discussion Leader **invites readers to send in lists of industrial problems that can be solved by the third method. A guinea will be paid for each one published.**

firm it was the custom to have one man testing and then putting right the faulty articles. This man complained very bitterly to his foreman that he did nothing but do other people's bad work over again. He did all the donkey work and was the busiest person in the shop.

It is possible that the difference between these experiences arose partly from the nature of the work. In the second case the work was skilled and the man dealing with the rejects was a highly skilled craftsman. The fact that he was never making anything himself may have frustrated his sense of craftsmanship and prevented him from satisfying his pride by using his skill to make a good article.

Another firm sends the rejects from the production shop to a special department manned by old people. The old people can then use their long experience and knowledge to make the article good unharassed by the pressure and speed of a production line. What system does your firm or your department use?

The problem of solving conflicts is always more difficult when some of the members of the group are neurotic.

People who are neurotic in some way tend to be in conflict with their work, with their companions, or with their superiors. Report No. 90 of the Medical Research Council published in 1947 gives us a high figure for the incidence of neurosis amongst factory workers. In a sample of over 3,000 men and women 10 per cent had suffered from definite and disabling neurotic illness and a further 20 per cent from minor forms of neurosis during the course of the six months study.

How are foremen tackling the problems of conflict raised by these neurotic people? Should the foreman exercise his skill to reduce likely sources of conflict for these people—should he provide them with a sheltered environment? Well, what do *you* think ?

DISCUSSION LEADER

T.W.I. for Pakistan

THE Pakistan Industrial Development Corporation has established an Institute of Personnel Training in Pakistan with the object of assisting the developing industry in that country with the problem of scarcity of skilled workers. The establishment of the Institute is an outcome of the activities undertaken by the Ford Foundation, and earlier on by the I.L.O., in introducing the T.W.I. system of supervisory training. (**T.W.I. Topics,** 1/55.)

Removing the debris after a recent explosion in a London food factory. Escaping ammonia was the cause.

How to Reduce Explosion Risks

By HENRY ALLEN
Personnel Manager, British Division, Yale & Towne Manufacturing Co. Ltd.

Wherever heat treatment processes involve the use of inflammable substances, serious explosions are liable to occur. In this article, the writer records some of the more common accidents and suggests how best to prevent them.

ALL inflammable substances are suspect because of their explosive quality, and some of them have the ability to explode in the absence of air. Any installations in which hydrogen/air mixtures can form, for instance, demand a meticulously safe working policy since hydrogen explodes so violently that considerable damage invariably results.

Heat treatment and brazing processes, where air, gas and high temperature combined, have often produced explosions. What has sometimes happened is that hydrogen escapes into the workroom, and when the hydrogen pressure drops below that of the atmosphere, air and hydrogen mix. When the gas and air mix inside the piping system or operating chamber, an explosion can well follow.

In this particular application to heat treatment, an American technique recently evolved by Mr. R. M. Carson of the National Bureau of Standards has largely scotched the dangers of explosions through the hydrogen/air mixture. The technique employs helium, which is used to flood hydrogen pipe lines automatically, in order to prevent air from entering the operating chamber of the gas lines whenever the hydrogen pressure falls below the atmospheric pressure.

In the technique, a cylinder of helium (which is inert and has no effect on other gases or metals) is joined with the hydrogen piping, and a pressure regulator in the helium line is set from 10 to 20 pounds lower than the regulator in the hydrogen line so that the helium starts to flow only when the hydrogen line pressure drops to that set for the helium. Hydrogen remaining in the pipe lines and in the operating chamber is driven out by the helium.

What is now known in America as the "Carson process" is being successfully used in connection with radio-frequency heating, hydrogen furnaces, radiant ovens and various other installations.

The facts to be appreciated about hydrogen are first that it is only $\frac{1}{14}$th as dense as air and in a good ducting system a strong draught can be obtained by natural flow. No duct through which hydrogen passes should be narrow or involve many bends, and if the duct is adequate no fan should be used to improve the draught.

Hydrogen/Air Hazards

Secondly, little of the normal apparatus to which the term "flameproof" is applied is reliable for use with mixtures of hydrogen and air. For this reason, it is advisable to exclude electrical apparatus from atmospheres likely to contain a hydrogen/air mixture. If such a provision is not practicable, then only equipment which is totally enclosed should be used, and only that in which a positive pressure of air is maintained.

In the matter of maintaining a

positive pressure, the best technique is to fit the apparatus with a manometer, which will cut off the electrical supply if the pressure of air falls.

Pressure in its manifold ways plays a marked role in this business of explosion risk. All pressure vessels should be suspect for hazards and for that reason a safe working system erected round their use. It is essential that all such vessels should be scrupulously inspected at regular and frequent intervals, and if there is any doubt about their adequacy the routine check should involve a hydraulic test.

An accident was reported recently where a carbon tetrachloride fire extinguisher, refilled to the desired pressure, exploded as the air valve was being closed. Investigation revealed that the base of the container had been soldered to the shell and that equipment 12 years old had had no periodic examination. Such examination, had it occurred, ought to have resulted in the scrapping of any extinguisher with soldered joints.

It is to be recommended, furthermore, that a pressure gauge to indicate the pressure within the vessel should be provided where it is readily accessible. In every case, the safe working pressure should be clearly marked. It should be hardly necessary to add that every operator likely to deal with the containers should be fully trained to understand and respect the safe working system involved.

Training Essential

One cannot stress too strongly this need to train personnel. All accident statistics show how many explosions occur through employee carelessness. Gas-fired ovens and furnaces, which can be completely safe in operation, cause serious accidents because they are lit when taps or cocks are fully or partly open when they should be closed. A system of checking should be established that allows no possibility of this employee inadvertence or misunderstanding.

Gas-fired ovens need close attention from the safety angle if the explosion hazard is to be checked. The methods of securing satisfactory ignition are important, and it is advisable to have some system of explosion reliefs. An official document which deals fully with this point is "Safety in Design and Use of Gas Heated Ovens and Furnaces," Factory Form 1856, from H.M. Stationery Office. This pamphlet describes the various safety devices for gas supply equipment, including a low pressure cut-off which prevents the gas supply from being turned on if burner cocks are accidentally left open. Incidentally, it is advisable to fit safety devices on all standby equipment, which should be fully protected.

Heating Systems

Heating systems generally, though they mainly function unobtrusively, have all too often been the cause of explosions. Failure in the threaded joints of pipes, in the blow-down system of water tube boiler, has resulted more than once in a dangerous outburst. Corrosion must be ruthlessly sought out and where there is any possibility that condensate may form, a continuous fall away from the boiler should be arranged or drainage provided at all places where there is risk of condensate.

Any hold up in the piping system of the heating plant means that the boiler becomes a closed pressure vessel and an explosion may follow unless the obstruction is promptly removed.

Thermostats are often tied up with explosions too. Wherever a thermostat is in use there is the risk of the boiler's overheating and exploding. The solution of this particular problem is simple. All thermostats must be examined and tested frequently. Furthermore, all water and steam boilers must have safety valves, which must be inspected regularly to check that they have free action and that all feed valves placed between a feed tank supply and the boiler are fully open.

It is imperative also to ensure that no stop valves are shut on flow and return lines unless there is an open circuit connected with the boiler. Safety valves must be in direct line with the boiler without any intervening stop valves.

Accidents to boilers often occur during cold weather. Circulating systems freeze and trouble follows when the boiler is started up. But it will not do so if the boiler is equipped with a safety valve. No hot water supply tank need cause an explosion if approved relief valves with a relieving capacity based on the capacity of the tank are installed.

Unfired pressure vessels such as air tanks are relatively safe but even this type of pressure vessel will explode unless it is properly designed for its operating pressure and service and kept in good condition. Air tanks should have an inspection opening. Air taken into a compressed air system through a compressor contains dust which causes wear on the valves. Worn valves tend to raise the temperature of the air so that spontaneous ignition of oil vapours is encouraged. The suction line of the compressor should be located whenever possible, to take in clean, dry, oil free air. A filter will serve to ensure clean air. Compressor unloaders should be checked daily.

Temperature of course plays a major part in this problem of explosion hazards. Inflammable liquids such as petroleum products, and some industrial solvents, become explosion hazards when the vapours evolved from them reach inflammable or explosive concentration in air. Some gasoline for instance, is hazardous even at normal temperature, but material such as kerosene will not liberate inflammable vapour until it is heated to temperatures above the normal air temperature, usually above 100°F.

Electrical controls such as switches, cutouts, starters, and relays should not be installed where inflammable liquids are used unless they are

(*Continued on page* 478)

7 Hints on Safer Working

1. Prevent air from entering operating chambers and contacting the gas.
2. Exclude electrical apparatus from atmospheres likely to contain a hydrogen - air mixture.
3. Instruct every operator in " safety consciousness".
4. Fit safety devices on all standby equipment.
5. Guard against corroded and blocked piping in heating systems.
6. All water and steam boilers must have safety valves, which should be inspected regularly.
7. Tools must be spark resistant if they are to be exposed to inflammable vapours.

EQUAL PAY BY 1961

Government Idea May Spread To Industry

THE Government decision to introduce equal pay for men and women non-industrial civil servants will benefit some 155,000 women who will receive two increases yearly for the next seven years. Women civil servants will be on equal scales with men by January 1, 1961, by which time the concessions will have cost the Treasury £12,880,000. In the first full year it will cost £1,840,000.

For most grades of women civil servants there is at present a differential from the men of about 20 per cent, at the maximum of the salary scale, but juveniles of 19 to 21 already have equal pay.

A separate agreement is being arranged for 36,000 women including Post Office telegraphists and telephonists, 1,500 women tracers and drawing staff, and 17,500 women who do not do equal work with men. They may receive a "compassionate" increase in wages.

There is a widespread belief that the Government decision will open the way for equal pay among teachers and local government officials, and will be a lead to somewhat similar agreements in industry where women do the same work as men.

Worker Total Up 350,000

AT the end of 1954 the number of persons in civil employment was 22,710,000, an increase of 350,000 during the year. The principal changes were increases of 260,000 in the manufacturing industries, 80,000 in the distributive trades and 50,000 in professional, financial and miscellaneous services. Numbers in basic industries fell by 40,000.

The increase in the manufacturing industries included one of 180,000 in metals, engineering and vehicles; there were small declines in clothing and textiles. In the basic industries, the decrease took place in transport and agriculture; the coalmining labour force remained practically stable.

Accident Rate Down

FATAL accidents in British mines and quarries during 1954 fell to the low level of 371, record the latest provisional figures issued by the Ministry of Fuel and Power. Injuries, too, were fewer, numbering 1,854. These figures compare with those for the previous year of 392 deaths and 1,958 injuries.

Most deaths underground were caused by rock and roof falls at the coalface. These totalled 180 (compared with 181 for 1953), while fatalities from haulage and transport numbered 87 (93); from explosions of firedamp or coaldust 5 (15); and from other causes 56 (55), making the total of underground deaths 328 (344). Surface deaths totalled 43 (48).

One In Four Workers on Public Payroll

MORE than a quarter of the total working population of the United Kingdom, about 6,170,000 or 26½ per cent., are paid from public funds. These figures were recently announced by Mr. Harold Watkinson, Parliamentary Secretary to the Ministry of Labour and National Service.

The number was made up as follows (figures for June, 1954): central government, including the Forces and the Naafi, 1,970,000; local authorities, including police, 1,490,000; nationalised industries and other public corporations, 2,710,000.

The last section, in addition to coal, steel, transport, gas, electricity and water, includes hospital boards, airways corporations, the B.B.C. and a few small corporations and commissions, but not doctors and dentists, except those in the service of hospital boards.

Italian Labour In U.K.

IN 1954 more than 1,300 Italian workers were recruited for essential industries and services in Great Britain. This was done under facilities offered by the Ministry of Labour and National Service for the bulk recruitment of Italian workers at the employers' expense. Examples of industries and services recruiting Italian labour in bulk are brickmaking, tinplate manufacture, foundries, textiles and hospitals.

Clean Catering Advice

PROFESSOR A. B. SEMPLE (Liverpool medical officer of health) addressed canteen managers and students on *Equipment, Premises and Hygiene in Catering*, at a conference in Southampton recently.

Prof. Semple advocated the following instructions for canteen staffs: Hands should be washed after going to the w.c.; colds, or a sore in any exposed part, should be reported to a doctor, manager or catering superintendent; hands should be washed after contact with any unclean material, and nails and hair should be kept clean.

All food containers must be clean and, after washing, they should be rinsed in hot water: cutlery and crockery should be kept in enclosed cupboards away from dust; prepared food (shepherd's pie, trifles, etc.) should be cooled quickly by placing it in a refrigerator—it should never be allowed to cool slowly on a shelf.

Midland Expansion

ACCORDING to statistics issued by the Midland Regional Board for Industry, industrial development in the West Midlands in 1954 was almost double that of 1953. In 1953 there were 247 applications for new buildings or extensions covering 4,125,000 sq. ft. and giving additional employment for 5,372 persons. In the following year, 417 applications were made for projects covering 9,444,000 sq. ft. and providing additional employment for 9,973 workers.

Wages Council Goes

THE Minister of Labour and National Service is to abolish the Rubber Reclamation Wages Council (Great

CLEANING COLOSSUS

Specially designed for use in large factories, warehouses, hangars, etc., this new **Cimex Fraser Tuson** vacuum cleaner on wheels is powered by a 2½ h.p. traction motor. The vehicle has four speeds which can be used in either direction. The total width of sweep is 32 inches and the turning circle has a radius of 82 inches. Cost of the vehicle is £1,450.

Britain), following a submission by the Rubber Reclamation National Joint Industrial Council that the great majority of workers in the trade now have their wages and conditions regulated by the Joint Industrial Council and that the Wages Council, therefore, serves no useful purpose.

In Brief

THE President of the Board of Trade (Mr. Peter Thorneycroft) has appointed the following new members to the Council of Industrial Design: Mr. Misha Black, Prof. R. Y. Goodden, Messrs. William Johnstone and J. M. Richards. Those re-appointed on the termination of their existing appointments are: Messrs. George Breeze, Geoffrey Dunn, Lesley Gamage, G. W. Lacey, R. A. Maclean, F. J. Stratton, Miss Mary Grieve and Lady Sempill.

* * *

The index number of industrial production (1948 = 100) was estimated provisionally at 137 for November (an earlier estimate put it at 136-137), compared with a revised figure of 136 for October, 1954. Figures for the corresponding months in 1953 were 133 for November and 131 for October.

* * *

As a result of new regulations made on the recommendation of the National Insurance Advisory Committee, the amount which an unemployed man can earn in a spare-time job without losing his unemployment benefit is doubled from 3s. 4d. a day to 6s. 8d. a day.

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The European Mineworkers' Union in the Northern Rhodesia copper belt recently decided, in a ballot of all its members, to allow Africans to be employed in some relatively skilled jobs now held only by Europeans.

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Bonuses of £10 have been awarded to 194 drivers of the transport fleet of *T. Wall and Sons, Ltd.*, for three years of accident free driving. In addition, 10 drivers have received lesser sums, having been judged only partly to blame for accidents during the period.

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The directors of *Horton Manufacturing Co., Ltd.*, announce their acquisition of the Birmingham firm of *Fitchetts, Ltd.*, makers of soaps, detergent powders and liquids, and a large range of industrial cleaners. The two companies will continue to trade separately but will operate from their newly acquired premises at Rickmansworth, Herts.

* * *

A new Civil Defence depot at North Hykeham, Lincs., was built by the voluntary efforts of the North Hykeham and Carlton area members of the Civil Defence Corps, working in their spare time.

The new premises consist of two Nissen huts, one for a training centre and social club, and the other to house vehicles and equipment.

Electronic Office Boys

OVER 500 delegates attended a one-day conference held by the Birmingham branch of the Office Management Association on January 31. It was the most successful ever organised by the branch and had as its theme "Your Mail And How To Handle It."

On show were the latest machines by some 25 firms of office equipment manufacturers designed to perform most of the menial but essential tasks traditionally carried out by the office boy. They included a letter franker that can deal with 1,000 envelopes in the time it takes to lick six stamps and an electric letter-opener that can slit mail in a matter of seconds.

The event was supported by the Birmingham Productivity Association.

Smog Charts

SMOKE given off from both domestic and factory chimneys makes a handsome contribution to that widely publicised menace "smog". What is more, a chimney belching forth smoke represents waste. The problem has caused so much concern that a Committee on Air Pollution was set up some time ago.

The Committee made certain recommendations, among them being some observations on the use of the Ringlemann Smoke Chart. It was pointed out that many factory managements were unaware of the good use to which the charts could be put by their own staffs. The charts are simple to use and provide a reliable and inexpensive method of estimating the density of smoke emission from factory chimneys. **(Rospa Bulletin.)**

Office Conference

THE Glasgow and West of Scotland Branch of the Office Management Association is again organising a Spring Conference for Executives from the 15th to the 17th April, 1955, at the Skelmorlie Hydro Hotel, Firth of Clyde.

The subject chosen is "Office Conditions and Remuneration" and the Conference Speaker will be Mr. O. W. Standingford, F.I.I.A., F.O.M.A., financial controller of *John D. Francis Ltd.* of Liverpool.

Sevenfold Increase

THIS year's Factory Equipment Exhibition will be held at Earls Court from March 28 to April 2. Earls Court has been chosen for the first time because of the vast increase in the number of exhibitors; altogether the event will be seven times larger than in 1953. The National Conference of the Institution of Works Managers is being held in conjunction with the Exhibition.

APPOINTMENTS

At the recent annual general meeting of the Industrial Welfare Society, the following were elected to the council: **MR. R. A. BANKS,** personnel director, *I.C.I., Ltd.*; **COL. L. BESWICK,** secretary, *Williamson and Sons, Ltd.*; **LORD BILSLAND,** chairman, Scottish Regional Board for Industry; **MR. J. M. CAMPBELL,** chairman and managing director, *Booker Brothers McConnell, Ltd.*; **MR. H. S. GIBSON,** managing director, *Iraq Petroleum Co., Ltd.*; **SIR FREDERICK JAMES,** managing director, *Tata, Ltd.*; MR. **LAWRENCE NEAL,** chairman, *Daniel Neal and Son*; **SIR HENRY SELF,** deputy chairman, British Electricity Authority; **EARL OF VERULAM,** managing director, *Enfield Cables, Ltd.*

MR. STANLEY BARNES, for the past three years assistant safety officer at the foundries of the *Staveley Iron and Chemical Co., Ltd.*, has been appointed to a similar position with *Messrs. Hadfields*, of Sheffield.

MR. R. P. BROOKES has been appointed chairman and managing director of *Garringtons, Ltd.*, of Bromsgrove, Worcs., in succession to **MR. J. H. BEAN. MR. R. A. R. MacCLELLAND** becomes deputy managing director.

CAPTAIN H. LEIGHTON DAVIES has been appointed chairman of the Welsh Board for Industry in succession to **SIR PERCY THOMAS.** Captain Leighton Davies has been a member of the Welsh Board for Industry since 1946 and vice-chairman since 1953. He is assistant managing director of the *Steel Company of Wales* and a director of *Richard Thomas and Baldwins Ltd.*

MR. R. P. MORISON, Q.C., has been appointed independent chairman of the Executive Committee of the British Iron and Steel Federation in succession to the late **MR. FREDERICK GRANT, Q.C.** Mr. Morison, who is 54, is the elder son of the late Lord Morison. He has been a member of the Industrial Disputes Tribunal since 1944, and has latterly been a Deputy Commissioner in Scotland under the National Insurance Acts.

MR. GEORGE VAUGHAN has been appointed works manager of *Dunlop's* factory at Brynmawr and **MR. J. W. TIDSWELL,** works manager of their Hirwaun factory. They succeed **MR. B. J. HAILL** who held both appointments until his promotion to works manager at the company's Cambridge Street, Manchester, factory.

MR. OLIVER J. WILLIAMS, formerly assistant education officer at the head office of *Richard Thomas and Baldwins, Ltd.*, has been appointed staffing and records officer to the company. He will be responsible for the recruitment of head office staff, job evaluation and grading, promotion and salary scales, and staff training (in collaboration with the education department).

HOW TO CUT YOUR CANTEEN TEA COSTS

By A. H. CHAMBERS

Following numerous enquiries to this journal on the matter of canteen tea costs, here is an article by an expert from the Tea Bureau telling how catering managers can reduce the cost of this service and improve its efficiency. The article is in two main parts: canteen counter service and mobile service. In each, using the right equipment and avoiding waste are key factors.

THE recent increases in the price of tea are clearly causing personnel and welfare officers considerable concern, and many are asking how they can maintain this valuable service without raising the cost to their management.

To increase the price of a cup of tea or purchase cheaper tea and use less of it are not necessarily satisfactory answers to this problem. The former merely antagonises the workers, whereas cheaper tea and excessive economy of usage invariably result in poor tea and an immediate falling off in sales. Before seriously contemplating such action, it is always advisable to carry out a complete overhaul of the factory tea service and make quite sure it is suited to prevailing conditions, that it is efficiently organised and run, and that there is no unnecessary wastage of staff or dry tea and ingredients.

Broadly speaking, the actual nature of a service will be conditioned by the factory layout, company policy, and any regulations governing the serving of tea and refreshments at the machine or bench with or without a timed break.

Canteen Counter Services

From a canteen point of view, the most economical service is clearly one in which the staff are allowed to go to the canteen for their tea. With this type of service, provided the breaks can be staggered and the canteen possesses reasonable seating accommodation, it should be possible to handle the entire service with ordinary canteen staff and the minimum amount of water-boiling and tea-making equipment. The fact that the service is concentrated within the canteen also simplifies over-all supervision. With this type of service therefore there is seldom any question of economy in staff and the only savings that can be made are by tightening up or improving the tea-making and distribution arrangements.

Milking a cup from an automatic measure; an economical recipe is 24 measures to the pint.

The first consideration should be to make sure that you are using the right type of equipment. In all counter services, teapots with removable infusers are preferable to multi-pots. Experience has shown that where tea is made and served from teapots, fresher and better tea results, sales are invariably higher and, by making smaller quantities, the risk of wastage from unsold tea is reduced to an absolute minimum. There is no quicker way of wasting canteen funds than by making a full urn of tea and then having to throw a proportion of it away owing to sales not coming up to expectations.

Secondly, in canteen counter services, tea should always be poured direct into pre-milked cups and the amount of milk measured carefully by means of hand or automatic milk measures. An economical milk recipe is 24 measures to the pint, which would be found adequate for the average taste. In no circumstances, allow staff to pre-milk cups direct from jugs as this inevitably results in wastage.

Another very important point to check is, of course, dry tea usage. Every canteen should be working to a definite tea-making recipe and this should be strictly observed at all times. We recommend a basic recipe of 1½-oz. leaf for every gallon of boiling water. The tea-maker should therefore be provided with tea already made up in pre-weighed packets, containing the exact amount for each teapot or, alternatively, a hand measure of the correct size for the leaf which is being used. Here again, experience has shown that where staff are permitted to measure tea indiscriminately with extraneous spoons, serious wastage of tea invariably results.

Finally, in a canteen counter service it is often false economy to add sugar to the tea before it is served. Now that sugar is freely available, very few customers abuse the privilege of being allowed to help themselves and, by providing sugar at the service point, you avoid the necessity of making separate tea for customers who do not take sugar. This eliminates any risk of wastage from this source.

Mobile Services

In factories where the policy of the firm or the layout of the factory prevents tea being served in the canteen, it becomes necessary to organise mobile trolley services which

enable the tea to be taken direct to the various departments and served to the staff at their place of work. This type of service is always more expensive to organise and maintain, as trolleys and trolley assistants are necessary and difficulties of control and supervision arise.

In this type of service, one of the first points to check is the routing of the trolleys and the number of trolley assistants employed. Badly planned trolley routes can easily result in wastage of both time and labour. Where there is no fixed tea break, one trolley may be able to serve up to 150 persons with both tea and snacks, but this will depend upon the density of the workers within the factory buildings and the distances to be covered.

When a controlled tea break is observed and service must be completed in 2 to 3 minutes, it is seldom possible to serve more than 80 persons from one trolley and then only if the tea is poured out before the break signal is given. In such services, both time and labour can be saved if the steward system of collection from the trolley can be employed. By this means, one person collects tea and snacks for a group of from 16 to 20 persons and is responsible for collecting and returning the soiled crockery at the conclusion of the break.

Once you have made sure that your trolley routing and staff position are economical and efficient, the tea-making and distribution arrangements should be closely reviewed.

The earlier remarks regarding tea usage apply equally to this type of service and, wherever possible, the dry leaf should be supplied to the tea-maker in pre-weighed packets containing the exact amount for each multipot. This relieves the trolley staff of the responsibility of measuring the tea and ensures perfect stock control.

In trolley services where cups are provided, always pre-milk these to a pre-determined recipe. In services where workers provide their own cups, always carry the milk separately, either by fitting special tea-milking equipment to the multipot or by drawing off the black tea for service into 1-gallon teapots into which a fixed measure of milk has already been added. If you add milk to the multipot, you will lose 8 cups of tea from each 5-gallon urn, and lose both milk and tea from any unsold beverages. You will also increase the risk of deterioration through loss of both colour and flavour during service.

Another important point is to avoid making part multipots. If the quantity of tea required on a trolley is slightly in excess of the capacity of the multipot, prepare the extra tea in a 1-gallon or smaller teapot and serve this first. Partly-filled multipots are invariably wasteful and seldom result in consistently good tea.

Finally, always keep a very close watch on sales and check returning trolleys by measuring unsold tea with a dipstick. By this means, you will very soon be able to assess the actual requirements of each trolley with a surprising degree of accuracy and eliminate all risk of loss through unsold beverages.

In this article we have suggested a number of ways in which personnel or welfare officers can check up on their tea services and possibly effect economies which will more than compensate them for the recent increases in the price of their tea. If your service stands up to such a searching investigation and no possible loop-hole for economy emerges, you may be faced with the unpleasant task of raising the price of tea to the workers or informing your directors that one of their most important welfare services is going to cost them more money.

If you have to choose the first alternative, you can take comfort from the fact that a recent investigation revealed that where canteens were selling really good tea at a fair price and the reasons for increases were explained to the workers, little or no opposition to higher prices resulted. It was only in factories where poor tea was being served that sustained opposition occurred.

Tea Economy Points

A. Counter Service

1. *Use teapots with removable infusers.*
2. *Pre-milk the cups at 24 measures to the pint.*
3. *Work to a definite tea recipe, 1½ oz. tea to a gallon of boiling water.*
4. *Let customers add their own sugar.*

B. Mobile Service

1. *Plan trolley routes to save time and labour.*
2. *Organise a system of collection from the trolley.*
3. *Buy tea in pre-weighed packets containing the exact amount for each multipot.*
4. *Do not add milk to the multipot.*

CANTEEN ADVICE BUREAU

Tea Charges

My company has, since about 1938, *supplied cups of tea to our staff (numbering about* 150) *twice a day free of charge through the canteen. Due to the steady increase in prices the position is becoming somewhat expensive and we are proposing to make a charge for it in future. The purpose of writing to you is to enquire whether many firms do in fact supply tea free of charge. Our enquiries locally have shown that no one else does it, and we are wondering whether you have any information on this matter.* (D. J. W., Camberley).

THE most recent and authoritative survey carried out amongst industrial canteens provided the following information:—

About 70 per cent. charged 1½d. per half-pint cup.

About 30 per cent. charged 2d. per half-pint cup, and less than one per cent. made no charge.

The survey also indicated that most of those making no charge were among the giant firms.

In London, however, quite a number of offices with staffs between 100 and 200 do supply tea free of charge, although the majority may charge between 1d. and 2d. a cup.

Menu Books

We are wondering whether it is possible for you to recommend a book or leaflet dealing with menus for canteens.—(M.V.C., Farnborough).

WITH such differences between types of canteens, prices charged for meals, degree of efficiency of the catering staff and the food habits of the workers, it is difficult to find a book of universal appeal. One could perhaps benefit greatly from study of such a guide as "General Hospital Diets" which can be had from King Edward's Hospital Fund for London, 24-26, London Bridge Street, London, S.E.1, price 3s. 6d. post free. From the pattern of menus displayed in this handbook it should be possible to incorporate new variations to suit local needs.

It is often said that nothing is more deadly to the canteen than monotony of menus, but too much enthusiasm in the introduction of new variations can be equally damaging. The most ardent socialist in the works will often be the most conservative in regard to food habits. The modern trend in catering is for a higher standard in every department, but in this matter of canteen menus it is wiser to proceed with caution.

Henry Smith built up quite a nice collection of menus in his "Master Menu and Recipe Book" (15s. 6d.), published by Practical Press Ltd., 1, Dorset Buildings, Salisbury Square, London, E.C.4. Many of these could also be adapted to meet local needs.

Profits on a plate

Here is a plate that will pay for itself in a very short while. In common with all Streetly Melamine Ware, it is made to withstand the rough usage of the canteen and kitchen—remaining free from cracks and chips, long retaining its showroom brightness and colour. It is a pleasure to handle both physically and financially.

To cut your catering costs — choose

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Tulle Gras is medically accepted as a speedy and effective treatment for burns and wounds. Free drainage helps quicker healing and its painless removal makes it popular with Doctor and Patient alike. "PERITEX" Tulle Gras offers many advantages over standard dressings. No scissors or tweezers are required. Already cut into convenient sizes, each dressing is wrapped in transparent covers so that it can be applied untouched by hand. Simply slide off the covers when placing on the wound. Tins of 150 dressings in two sizes.

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New Industrial Equipment

EXECUTIVES' SURVEY OF AIDS TO INCREASED PRODUCTION

Readers who wish to know the suppliers of any of the products referred to in this section are asked to write to the Editor, quoting the reference number which appears at the end of the paragraph. We are always glad to consider for publication descriptions — preferably accompanied by an illustration suitable for reproduction — of new products.

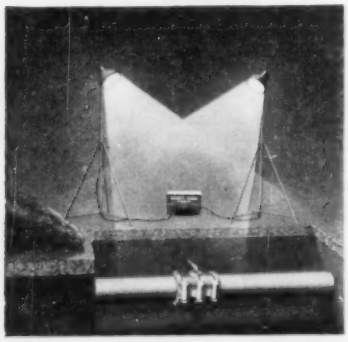
Lighting

PORTABLE POWER

THIS portable lighting equipment, say the makers, has been developed to meet a widespread demand from public utility undertakings to enable repairs to be carried out at night.

The battery is a starter type accumulator which will work both lamps for nine hours or one lamp for over 18 hours and is protected from the weather by a strong acid-resisting teak case. The lamps are weatherproof, having aluminium reflectors polished on the inside to give a powerful beam, and are mounted on collapsible sherardised steel stands of ample strength and rigidity. The fuses, which can be instantly renewed, are isolated from the atmosphere in glass tubes and the switches are of the snap-action type.

The lampstands fold up into the minimum space and reflectors can be

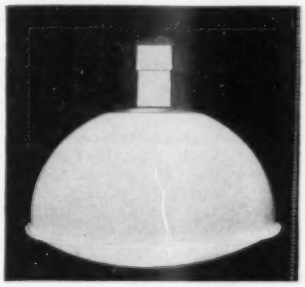


removed complete with glass fronts to avoid damage during transport. The electric leads unplug both at the base of the lamp stand and at the battery case.

The two 48-watt lamps can give wide or narrow beams according to reflector adjustment and can be swivelled through a wide angle to reach work in almost any position. Complete with case the battery weighs 80 lb. and the lamp and stand complete 16 lb. each. **(PM 894.)**

PERSPEX BRILLIANCE

NEW on the market is this perspex globe lighting fitting, which comes in 100/150 watt to 500 watt. The fitting itself comprises a reflector which may be used either open or with a diffusing cover, making it completely dustproof. Percentage of upward light and brightness can be controlled by combining suitable

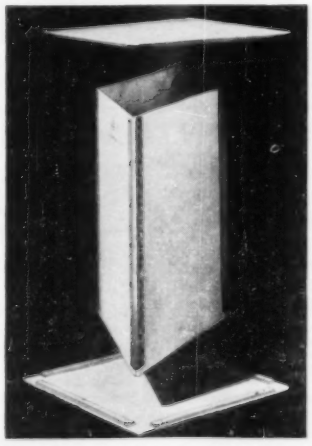


units. The body is diecast corrosion-resistant aluminium alloy, and the globe interior is finished in stove enamelled white. In addition to a balanced light distribution, the light output ratio exceeds 85 per cent. **(PM 895.)**

Packaging

ROBUST BUT COLLAPSIBLE

PLYWOOD, hinged with steel strips, has been used to produce this robust, collapsible box. The standard size adopted is 8 cu. ft., each box being designed to take a load not exceeding 280 lb. Two minutes' work, say the makers, is sufficient to assemble the box,



and the steel strip hinges will stand 150 to 200 bends without fracturing.

Both lid and base can be framed with mild steel angle, and softwood battens can be provided for extra strength or nail closure. This plysteel case should prove a boon in places where storage space is limited, or when required for return after use. **(PM 896.)**

RAPID BANDER

THIS new fully automatic band strapping machine is said to be five times faster than a hand strapping machine, and is operated with one movement of a foolproof single control handle. The strapping material is automatically applied at the correct tension, lies flat with no sharp edges and affords

maximum reinforcement and protection irrespective of the size of the package. A coil of special galvanised strip sufficient for 6,000 seals is carried inside the machine. Reloading is done in a few seconds.

Packages are brought to the machine on rollers and need not be held while strapping is applied. It is capable of 16 to 18 straps per minute operating with $\frac{3}{4}$ in. or $\frac{1}{2}$ in. wide band strapping and will strap packages up to 20 in. wide by 21 in. high. The machine is self-contained with its own $\frac{1}{2}$ h.p. power unit. **(PM 897.)**

CARTON STAPLER

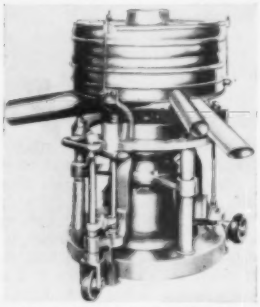
NOW on the market is a treadle stapling machine designed for a number of industrial uses but chiefly for

the bottom sealing of cardboard cartons. The machine is foot-operated and said to be of lightweight yet robust construction. It has a retractable, jam-proof head with a special mechanism to ensure the ejection of single staples. Overall dimensions are 48 in. by 15 in. by 15 in. **(PM/898.)**

Efficiency Aids

FINE GRADING

THIS new grading machine, say the makers, has proved very popular in the food and chemical industries on account of its capacity for sieving and straining through ultra-fine meshes. The machine classifies into three grades through the top two mesh surfaces being

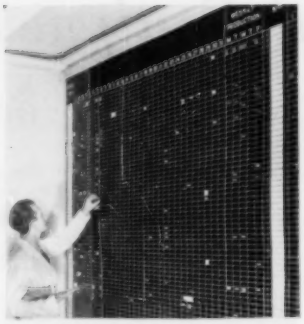


fitted with a 40 mesh for the extraction of dust, the remainder of the material passing over a 20 mesh which separates the oversize particles so that the three outlets of the machine yield separately: the dust, the required product and the oversize material. **(PM/899.)**

MAGNETIC CONTROLLER

A USEFUL device for use in production control, this magnetic chart tells at a glance the number of each type of product under way, the stages they have reached and whether any department is likely to become overloaded and so cause a bottleneck.

Measuring 13 ft. by 8 ft., it is supplied with a wide range of cut-out letters, figures, symbols, card-holders and various



general purpose shapes in any colour. Across the top of the chart are enumerated the days of the month, and downwards are the names of the goods manufactured.

A different colour denotes each fresh stage of production entered, and a vertical cursor moves across the chart to give the current situation at a glance. Among the advantages which the makers claim are that charts are rapidly set up, always neat and easily variable and washable. **(PM/900.)**

EASIER DRAFTING

ONE of the latest developments to make the draughtman's work easier is this drafting machine with a reference table. A drafting board is hinged by means of built-in supports, and these allow the board to be adjusted as desired. Four personal drawers, one full size plan filing drawer and bookcase ends are immediately adjacent to the draughtsman. At the same time the drafting board support quadrants are built integral with the top of the table thus

giving a clear reference area for each draughtsman at the back of the alternate board. **(PM/901.)**

Canteen

'STRAIMASHING'

THIS *Straimasher* has recently been developed for caterers serving 200 or more main meals per day. It has two functions: potato mashing and soup straining, and the makers claim that it reduces waste and saves man-hours.

By a simple, turn-the-handle action, the *Straimasher* can mash 1 cwt. of

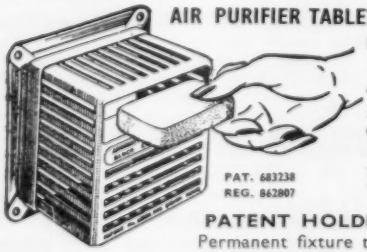
potatoes in four minutes, the loss of heat being negligible. With soups, it is said to strain these finely without the loss of valuable solids. **(PM/902.)**

'ROTO-GRILLING'

THIS new electrically-operated *Roto Grill* for sausage grilling can do 50 sausages at one time. The automatic and rotating motion of the rollers, say the makers, gives uniform and thorough cooking and does away with the need for watching and turning. Other advantages claimed are no burning nor bursting and ease of cleaning and operating.

Of stainless steel construction, the

AROMATIC TABLETS NEUTRALIZE NOXIOUS ODOURS



AIR PURIFIER TABLETS AND HOLDER
FOR LADIES' AND GENTS' TOILETS

Air Purifier Tablets

3 Doz. - 35/-
6 Doz. - 68/-
1 Gross - 130/-

Slip Tablet into aperture—cannot be removed or stolen

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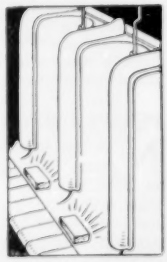
Permanent fixture to door or wall

DISINFECTANT "G" BLOCKS
FOR GENTS' STALLS AND CHANNELS

G-BLOCKS FOR STALLS

3 Doz. - - 28/-
6 Doz. - - 55/-
1 Gross - - 105/-

One Block in each stall—they need no further attention



Carriage paid orders £5 upwards

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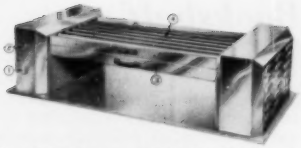


Roto Grill has a switch for heat control and one for the rollers which are fitted with internal nickel chrome elements. It measures 38 in. by 16½ in. wide and 10½ in. deep and weighs 55 lb. **(PM/903.)**

NEW DETERGENT

NOW being marketed is a liquid detergent which, it is claimed, is practically odourless, refined to handle, and gives an abundant lather. Equally efficient in hard and soft water, it is economical in use. It should be well received in canteens and other industrial premises for a diversity of applications, ranging from the removal of grease and dirt from cooking utensils and crockery, to cleansing floors and paintwork.

(PM/904.)

Handling

PALLET TRUCK

ALTHOUGH the modern trend in mechanical handling is to use a power truck whenever possible, it is sometimes necessary and economical to use a hand pallet truck. Three typical instances are: (1) on a floor not strong enough to carry a power truck and full load, (2) in confined spaces, and (3) for infrequent and small numbers of loads. This new pallet truck has been developed to give the best service under just these conditions.

The all-steel welded frame is built of strong box sections which result in a capacity of 4,500 lb. with a service

weight of only 3 cwt. This very large capacity will normally not be fully utilised, as it would, of course, require the services of perhaps two operators to move a full load.

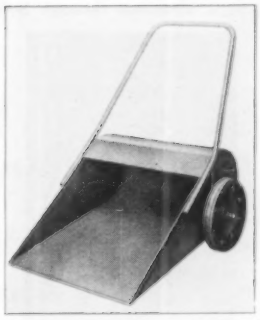
The new truck can be supplied with standard fork lengths from 36 to 72 in. and with overall fork widths of 22 or 27 in. The hydraulic pump for raising the load off the ground is operated by the handle, and the connecting leverage system is arranged to give the maximum effect towards the top position of the handle, so that heavy loads can be lifted easily even in the most cramped surroundings. **(PM/905.)**

Cleaning

BIN ON WHEELS

THIS *Clean-Aid* sweep-up barrow has a body measuring 27 in. wide by 36 in. long and a capacity of 2 cwt. Two 14 in. by 2 in. rubber-tyred steel wheels are fitted, and the total weight is 75 lb.

The barrow is low-loading and specially designed for easy and quick collection of refuse, ashes, factory waste, etc. It is claimed to cut out stooping, shovelling and lifting, as the refuse is swept straight



The skilled man you need . . .

Among the millions* of skilled workers who read the DAILY HERALD every day you will almost certainly find the replacement you are looking for. And naturally the easiest, most economical way of offering him the job is to advertise in the classified columns of the paper he reads—the "Herald."

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. . . reads the DAILY HERALD

Rate 20/- per line. Communications should be addressed to: Classified Advertisement Manager, DAILY HERALD, Acre House, Long Acre, London, W.C.2. Tel.: Temple Bar 1200 (Ext. 454 & 446).

NEW INDUSTRIAL EQUIPMENT

(*Continued from previous page*)

from the floor into the barrow.

One feature is that the leading edge is reinforced by a welded steel strip, while the nose consists of a ¼ in. diameter round rod of hard steel welded to the full width of the barrow. **(PM/906.)**

CLEANER/POLISHER

KNOWN as the "Finch," this machine sucks up dust and polishes the floor in the same operation. By combining the two operations, say the makers, the new machine cuts maintenance costs and does the job with far greater efficiency.

Counter-rotating brushes are mounted on a flexible plate so that irregularities in the floor surface do not affect polishing, and dust is absorbed through holes in

this plate. The suction bag is attached to the handle.

There are two electric motors—one driving the brushes, the other the suction mechanism. The use of separate motors enables the brushes to be reversed, thus ensuring longer brush life and a higher polishing efficiency. **(PM/907.)**

NEW TRADE LISTS

Specification Handbook. Issued by *Tretol Ltd.* A reliable guide to the practical aspects of building protection and maintenance. As fresh building techniques are developed, further specification sheets will be sent out for inclusion in the handbook. Free from *Tretol Ltd.*, Tretol House, The Hyde, London, N.W.9.

RATOIDS *destroy* **RATS and MICE**

Ready for use clean to handle

Ratoids (*Red Squill*) Mousecrumbs 1/4, 2/9.

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A revolutionary presentation of Warfarin. A most attractive food to rats and mice. 1/9, 3/9.

From Chemists (Boots, Timothy Whites), Corn and Seed Merchants, Ironmongers, Stores.

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Management Bookshelf

Safety Manual

Safety in Industry: An Introduction to the Protection of Personnel. *By D. I. Macfarlane. Published for "Machine Shop Magazine," by Iliffe and Sons, Ltd., price 7s. 6d.*

ACCIDENTS and diseases are frequently incurred not because protective measures are lacking, but as a result of a failure to maintain or use them, whether they be on the plant itself or in the form of personal protective equipment. With these words Sir George Barnett (H.M. Chief Inspector of Factories) in his foreword to this book, summarises a primary obstacle to accident prevention.

The special dangers of rotating machinery and the need for guards on presses and similar machines are emphasised as is the question of dust and fume control. Among other subjects which receive special attention are protective clothing, prevention of skin diseases and protection from the harmful radiations arising from the industrial use of X-rays and radio-active substances.

Finally, there are two useful chapters dealing with lighting and flooring, both of which play an important part in factory safety. Comprising over 70 pages, this book will be deserving of attention not only from employers, safety officers and factory medical staffs, but also from the workers who are actually exposed to the hazards under review.

Legal Guide

Legal Problems of Employment (Second Edition). *Published by the Industrial Welfare Society, price 7s. 6d.*

IN industrial life problems of a legal nature are constantly cropping up which require to be settled on the spot. For many years now the Industrial Welfare Society have issued to member firms a bi-monthly bulletin dealing with such problems, and in this volume many of the "questions and answers" which appeared in these bulletins are reproduced. There are five sections—Terms of Service; The Truck Acts; Factories Acts; Liability for Industrial Accidents; and Welfare Schemes.

Each section is preceded by an introductory note in which suggestions for further reading are given. The wider issues of ethical standards and management-employee relationships are not dealt with as the authors felt these were beyond the scope of the present work.

Human Relations

Human Relations in Small Industry. *By John Perry. Published by McGraw-Hill Book Co., price $5.50.*

EVERY vital part of the building of sound human relations within a small industry comes up for exhaustive examination in this work. Based upon the author's extensive experience over many years in labour, employee, executive and community relations, it describes with the aid of numerous practical examples the essentials of human relations in the small firm, pointing out exactly what causes poor working relationships, what should be done about them and *how it should be done.* Among the wealth of aspect dealt with, the author singles out in particular the need for good communications ranging from the routine and formal records system to direct conversations with company personnel.

Balance Sheets

Jones Learns About Balance Sheets. *By B. A. C. Hills. Published by the Institute of Industrial Supervisors, price 2s. 6d.*

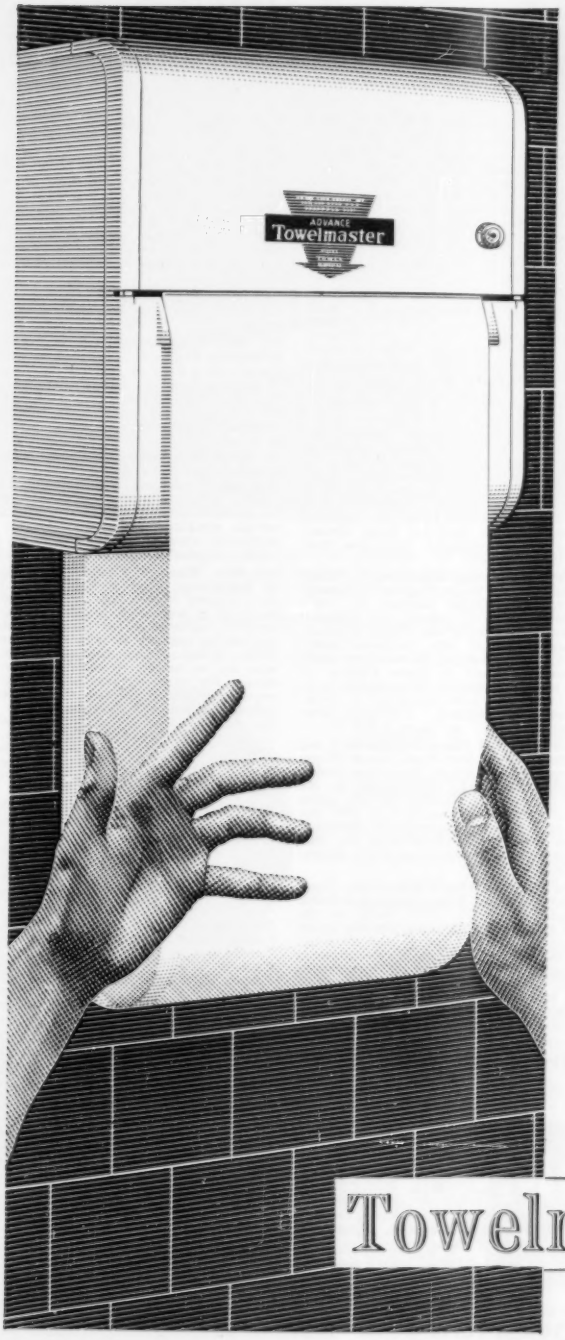
WRITTEN for the benefit of foremen, chargehands, operatives and trade union officials alike, this booklet goes a long way toward dispelling the mystery which for many people still enshrouds the procedures by which money is set to work in industry. It tells in a simple and interesting form the story of a journeyman woodworker's venture into the business world, and recounts how in time he came to master the intricacies of "capitalism".

Reducing Explosion Risks (*Continued from page 468*)

approved for explosive atmospheres. Electric lamps in storage places where inflammable vapours may accumulate should be enclosed in vapour-tight globes. Hanging lamps should be rigidly supported on conduits.

Tools used where inflammable vapours may accumulate should be made of spark resistant material. This applies specially to certain bronzes, where ether, carbon disulphide and such liquids which readily vaporise at air temperatures, are used. Steel bung wrenches and pipe fitters' tools are always potential ignition sources. Inflammable liquids left to themselves never cause an explosion. It is the things people in factories do or fail to do to them which produce disastrous explosions.

And that point leads, as all talk on accident prevention must do, back to the human factor. Ceaseless and continuous training and education of all personnel in the factory is imperative. The other point that must be stressed is that when an explosion does occur, every effort must be made immediately to record and obtain detailed information about its cause.



A clean soft dry towel for every pair of hands

How does the Towelmaster work?
A pull. Here's a length of laundry-fresh towel, enough and to spare for a really good dry. And as you pull, the used portion automatically winds into a separate compartment of the gleaming white Towelmaster cabinet. Nothing more efficient. Nothing more hygienic.

How much does the Towelmaster cost?
5/– per roll of towelling. Minimum usage only one roll per week. Installation is free. Maintenance is free. No replacement charges. In fact there are no other charges whatsoever.

How much is the Towelmaster worth?
Those few shillings give 180 pairs of hands an honest-to-goodness dry. Benefit staff and visitors alike. Give you 45 yards of *goodwill*. And what an infinitesimal price to pay for a clean bill of health!

What are your particular needs? We'll be glad to discuss them — without obligation.

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Summary of Official Publications

READERS' GUIDE TO ACTS, STATUTORY ORDERS, NEW RULINGS AND AWARDS CONCERNING INDUSTRY AND PERSONNEL

STATUTORY INSTRUMENTS

No. 1750. The Retail Bread and Flour Confectionery Trade Wages Council (England and Wales) Wages Regulation Order, 1954. Dated December 31, 1954, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (*a*). *H.M.S.O.* 9d. (Fixes the statutory minimum remuneration to be paid, the holidays to be allowed and the holiday remuneration payable to workers in relation to whom the Retail Bread and Flour Confectionery Trade Wages Council (England and Wales) relates.) Operative from January 31, 1955.

No. 1773. The Tin Box Wages Council (Great Britain) Wages Regulation Order, 1954. Dated December 29, 1954, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 4d. (Sets out the statutory minimum remuneration payable in substitution for that fixed by Orders X.40 and X.44, which are revoked.) Operative from January 14, 1955.

No. 43. The Boot and Shoe Repairing Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1955. Dated January 7, 1955, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 4d. (Amends Orders D. 103 and 107 by increasing the statutory minimum remuneration fixed by those Orders. Order D. 107 is revoked.) Operative from January 26, 1955.

No. 44. The Retail Food Trades Wages Council (England and Wales) Wages Regulation (Amendment) Order, 1955. Dated January 7, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 6d. (The First Schedule amends Orders R.F.C. 15 and 17 by : (1) increasing the statutory minimum remuneration fixed by those Orders; (2) repeating without alteration the provisions relating to minimum overtime rates which were contained in Order R.F.C. 17; (3) varying the amounts authorised to be reckoned as payment of wages by an employer in lieu of payment in cash where specified benefits or advantages are supplied by the employer. The Second Schedule repeats without alteration the amendments to Orders R.F.C. 4 and 15 which were contained in Order 17, which is revoked.) Operative from January 31, 1955.

No. 52. The Retail Drapery, Outfitting and Footwear Trades Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1955. Dated January 10, 1955, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 4d. (The First Schedule amends Orders R.D.O. 16 and 18 by increasing the statutory minimum remuneration fixed by those Orders. The Schedule also repeats without alteration the provisions relating to minimum overtime rates which were contained in Order R.D.O. 18. The Second Schedule repeats without alteration the amendments to Orders R.D.O. 4 and 16, contained in R.D.O. 18, which is revoked.) Operative from January 31, 1955.

No. 53. The Coffin Furniture and Cerement-making Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1955. Dated January 10, 1955, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 3d. (Amends Orders U. 55 and 58 by increasing the statutory minimum remuneration fixed by those Orders. Order U. 58 is revoked.) Operative from January 28, 1955.

No. 55. The Cotton Waste Reclamation Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1955. Dated January 11, 1955, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 2d. (Amends Orders C.W. 51 and 53 by increasing the statutory minimum remuneration fixed by those Orders. Order C.W. 53 is revoked.) Operative from January 28, 1955.

No. 56. The Retail Furnishing and Allied Trades Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1955. Dated January 11, 1955, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 3d. (Amends Orders R.F.A. 16 and 18 by increasing the statutory minimum remuneration fixed by those Orders. Order R.F.A. 18 is revoked.) Operative from January 31, 1955.

No. 68. The Hairdressing Undertakings Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1955. Dated January 12, 1955, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 4d. (Amends Orders H.U. 12 and 14 by increasing the statutory minimum remuneration fixed by those Orders. It also repeats without alteration the amendments to Order H.U. 12 which were contained in Order H.U. 14, which is revoked.) Operative from January 31, 1955.

No 82. The Linen and Cotton Handkerchief and Household Goods and Linen Piece Goods Wages Council (Great Britain) Wages Regulation Order, 1955. Dated January 17, 1955, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 4d. (Sets out the statutory minimum remuneration payable in substitution for that fixed by Order H.L. 44, which is revoked.) Operative from February 2, 1955.

No. 99. The Bread and Flour Confectionery Trade Wages Council (Scotland) Wages Regulation Order, 1955. Dated January 19, 1955, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 6d. (Fixes the statutory minimum remuneration to be paid, the holidays to be allowed and the holiday remuneration payable to workers in relation to whom the Bread and Flour Confectionery Trade Wages Council (Scotland) operates.) Operative from February 14, 1955.

No. 126. The Retail Food Trades Wages Council (Scotland) Wages Regulation (Amendment) Order, 1955. Dated January 25, 1955, made by the Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 4d. (Amends Orders R.F.C.S. 13 and 15 by increasing the statutory minimum remuneration fixed by those Orders. Order R.F.C.S. 15 is revoked.) Operative from February 14, 1955.

INDUSTRIAL DISPUTES TRIBUNAL AWARDS

No. 661. Wages and Conditions of Employment of Workers Employed in the Packing Case Making Section of a Firm of General Engineers and Arc Welders in London. Claim: For annual holiday payments and for an increase of 1½d. an hour for all adult male workers in accordance with specified agreements. **Award**: Claim established. (6/1/55.)

No. 662. Observance by Members of the Northern Greeting Card and Calendar Association of Certain Specified Terms and Conditions of Employment. Claim: That the employers should observe the terms and conditions of employment laid down in certain specified agreements. **Award**: That the employers concerned shall observe the recognised terms and conditions of employment. (7/1/55.)

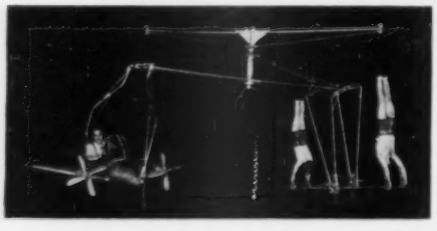
No. 663. Wages of Clerical Staffs Employed by an Engineering Firm at Warwick. Claim: That the company should pay their clerical staffs the increases in wages which were recommended by national agreement for such workers in the engineering industry to take effect from May 10, 1954. **Award** : The salaries of the clerical workers who are in receipt of salaries up to £625 per annum for male workers and up to £475 per annum for female workers shall be increased as follows: **Males.** At 25 years of age and over, 10s. 6d.; 23-24, 9s. 6d.; 21-22, 8s. 6d.; 20, 6s.; 19, 5s.; 18, 4s; 17, 3s.; 16, 2s. 6d.; 15, 2s. **Females.** Aged 21 and over, 7s.; 20, 6s.; 19, 5s.; 18, 4s.; 17, 3s.; 16, 2s. 6d.; 15, 2s. In the application of this award the company shall be able to take into account any general increases in clerical workers' salaries since May 1, 1954. (10/1/55.)

No. 664. Wage Rates in the Gloving Industry. Claim: For an adjustment of the graded wage rates. **Award**: That the basic time rates of wages of the workers concerned shall be increased by 2d. per hour for male and female workers in class A and by 1½d. per hour for male and female workers in class B. (12/1/55.)

No. 665. Observance of Recognised Terms and Conditions of Employment in Respect of Their Town Clerk by the Northampton County Borough Council. Claim: Whether the Northampton County Borough Council shall observe in respect of their Town Clerk the recommendations of the Joint Negotiating Committee for Town Clerks and District Council Clerks. **Award**: Claim established. (18/1/55.)

No. 666. Rates of Wages of Two Named Workers Employed by a Firm of Wool Combers and Fellmongers at their Mill at Hereford. Claim: That the workers concerned should be paid the increase in wages agreed in the wool textile industry which became operative in May, 1954. **Award**: That the wages of the two workers shall be increased by 3½ per cent. (21/1/55.)

No. 667. Salary Scales of Clerical Staff Employed at the Head Office of the Maritime Insurance Company Limited. Claim: For improved salaries. **Award**: That the salaries for clerical staff concerned shall be: At 16, £155 (males and females); 17, £170; 18, £185; 19, £205; 20, £225; 21, £250 (males), £235 (females); 22, £270 and £250; 23, £300 and £262 10s.; 24, £325 and £272 10s.; 25, £370 and £287 10s.; 26, £390 and £297 10s.; 27, £410 and £307 10s.; 28, £430 and £322 10s.; 29, £450 and £332 10s.; 30, £475 and £345; 31, £495 and £355; 32, £515 and £370; 33, £535 and £380; 34, £560 and £390; 35, £580 and £405; 36, £605 and £415. These salaries are subject to the addition of the bonus payment of 12½ per cent



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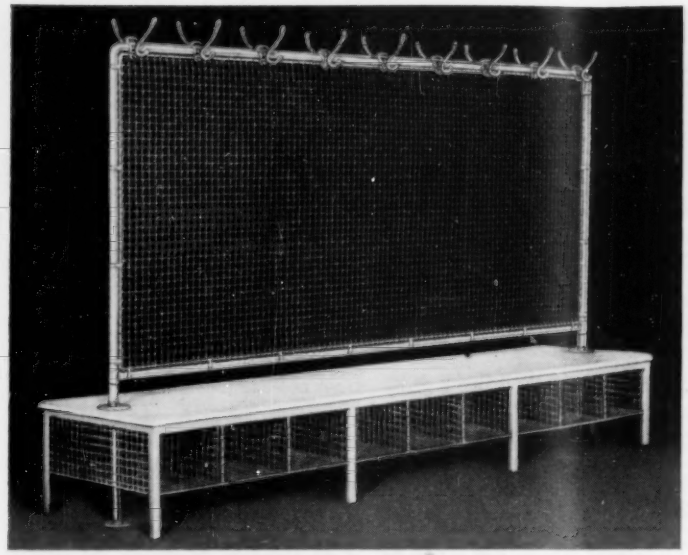

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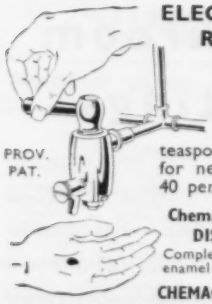

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at present in operation. The award is not to prejudice the right of any worker whose existing salary is in excess of that provided to continue to receive such higher salary. (24/1/55.)

No. 668. Remuneration of Certain Draughtsmen Employed by Remploy, Limited. Claim: That the company should apply to their draughtsmen the increase in wages granted to such workers in the engineering industry under a specified agreement. **Award**: That the wages of the draughtsmen concerned shall be increased by 10s. 6d. per week. (24/1/55.)

INDUSTRIAL COURT AWARDS

No. 2551. Air Ministry Viewers (Grade I) Employed on Ammunition Duties. Reference: For the payment of a lead rate of 12s. a week, by increments of 2s. a quarter to 20s., and then by increments of 2s. annually to 30s. **Award**: That Viewers I employed by the Air Ministry on ammunition duties shall, whilst so employed, be paid a rate of "M" plus 12s. by increments of 2s. quarterly to "M" plus 20s. and then by increments of 2s. annually to "M" plus 30s. (6/1/55.)

No. 2552. Forestry—Matters arising out of Award No. 2546. Reference: To determine a claim by the Trade Union side relating to mobile mechanics. **Award**: (1) As from the beginning of the first full pay period following November 19, 1954 (*a*) without prejudice to the right of a mobile mechanic whose individual contract with the Forestry Commission entitled him whilst so employed to any higher rate, the minimum rate for mobile mechanics shall be 170s. for a normal week of 47 hours; (*b*) the rate of any mobile mechanic which was less than 170s. on November 19, 1954, shall be raised to that figure. (2) Overtime, calculated on a rate of 170s. per week for all mobile mechanics, shall be payable for hours worked in excess of 47 in any week as from the aforesaid date. (18/1/55.)

No. 2553. Road Transport. Reference: Interpretation of Industrial Court Award No. 2550 **Award**: That the true intent of sub para. (*a*) of para. 5 of Award No. 2550 is that a driver is not designated as a night driver who is employed for one "emergency" turn on night duty in the course of a week, would, at the end of the week, receive his basic pay (that is for 44 hours at day rates), plus payment for one deemed day of 8 hours, plus any overtime calculated at day rates, plus 16s. (18/1/55.)

No. 2554. St. Helens and District Hospital Management Committee. Reference: Claim for the upgrading of the post of Chief Accountant to Deputy Finance Officer. **Award**: Claim established. (20/1/55.)

GENERAL

Civil Service Arbitration Tribunal Award No. 272. Claim: That the salary scales (London male) shall be increased in respect of the following grades in the Veterinary Services of the Ministry of Agriculture and Fisheries: Veterinary Officer, Assistant Veterinary Investigation Officer, Research Officer, Divisional Veterinary Officer, Veterinary Investigation Officer and Senior Research Officer II. **Award**: The salary scales of the following grades shall be: Veterinary Officer, Assistant Veterinary Investigation Officer, Research Officer, £635-£1,260; Divisional Veterinary Officer, Veterinary Investigation Officer, Senior Research Officer II, £1,320-£1,645. (19/1/55.)

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March Diary for Management

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18-19 **Southport.** Second North-Western Management Conference on "Management and Modernisation". In conjunction with the Institute of Industrial Administration, the Federation of British Industries and the National Union of Manufacturers.

BURTON MANOR

13-18 One-week Course (No. 594) on "Commercial and Office Management."

INDUSTRIAL WELFARE SOCIETY

2 **London.** Works Managers Conference.
2 **London.** "New Thinking" Lecture by Viscount Woolton.
6-11 **Harrogate.** Joint Course for Training Officers in conjunction with IPM, BACIE and NIIP.
8 **Dartford.** Training Course for Foremen and Forewomen.
9 **Woolwich.** Canteen Conference.
17 **Birmingham.** Canteens Course.
22 **Dartford.** Training Course for Foremen and Forewomen.
24 **London.** Industrial Editors (Welfare) Group.
24 **Wolverhampton.** Review of Apprenticeship Training.
25-28 **Oxford.** Residential Conference for Works Committee Representatives.
30 **Manchester.** Junior Executives Course.

INSTITUTE OF INDUSTRIAL SUPERVISORS

2 **Paisley.** "Industrial Insurance."
4-6 **Missenden Abbey, Bucks.** "Work Study for Supervisory Management."
8 **Chelmsford.** Mid-Essex Annual General Meeting.
14 **Falkirk.** "Apprenticeship Training (Day Release)."
17 **Coventry.** "Industrial Relations."
17 **London (Central).** Case Studies (Part II).
17 **London (S.E.).** Discussion on Case Studies.
23 **Ayr and Kilmarnock.** "Production Control and Paper Work in Industry."
28 **Paisley.** Industrial Film Show.
31 **London (N.W.).** Impressions of the Modern American Supervisor.

INSTITUTE OF INDUSTRIAL TECHNICIANS

24 **Manchester.** "Machine Utilisation."

INSTITUTE OF PERSONNEL MANAGEMENT

1 **London.** One-day Discussion Meeting for Senior Personnel Officers.
6-11 **Grantley Hall, Nr. Ripon.** Five-day Joint Training Officers' Course.
11-13 **Bournemouth.** Conference of the London and S. Eastern Region.
13-18 **London.** Five-day Residential Study Course on Employment and Welfare.
18-20 **Peebles.** Conference of the Scottish and Border Region.
25-27 **Hoddesdon.** Joint IPM/BACIE Meeting.

INSTITUTE OF WELFARE OFFICERS

25 **London.** "Welfare Reminiscences over Thirty Years."

INSTITUTION OF PRODUCTION ENGINEERS

29 **Luton.** "Management and Production."

NATIONAL INSTITUTE OF INDUSTRIAL PSYCHOLOGY

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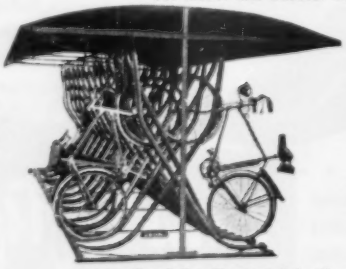

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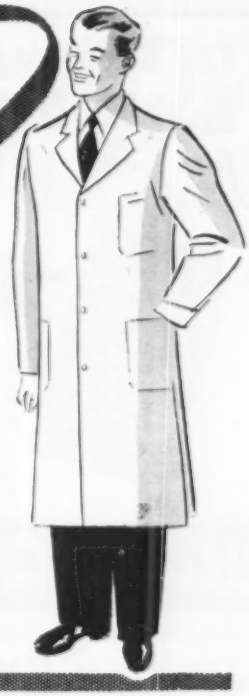

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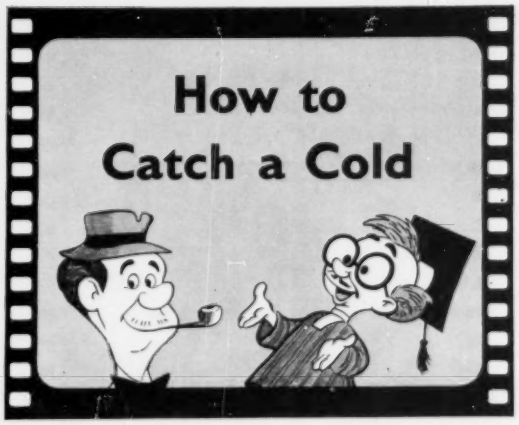

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